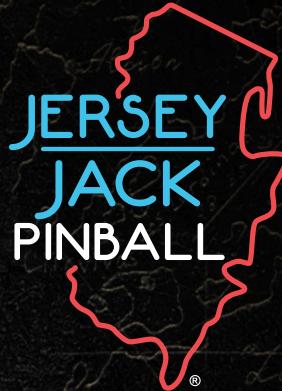


November 2018

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Disney
PIRATES *of* **CARIBBEAN**

Operations Manual Includes:

Game Setup - Testing & Adjustments - Parts Information - Reference Diagrams & Schematics - Service & Troubleshooting

Jersey Jack Pinball®, 1645 Oak Street, Lakewood, New Jersey 08701 Telephone: (732) 364-9900

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Manual Release 2.0

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Visit our customer support website, <https://www.jerseyjackpinball.com/support/>, and register your game. Be sure to include the game serial number. For your records, write the game serial number in the manual.

Serial Number _____

Jersey Jack Pinball® reserves the rights to make modifications and improvements to its products. The specifications and parts identified in this manual are subject to change without notice.

Ahoy, Pinball Fan!

Avast ye and Congratulations on the purchase of your Pirates of the Caribbean™ **Pinball** game. This is the very first design from Eric Meunier and I love what he and his Crew have created. It is loaded with mechanical action and is a beautiful work of playable art.

Ourrrrrrrrrr very own Butch Peel has once again created a masterful work with this Operations Manual and it is an essential part of our Customer Service to support this game today and for many years to come; thank you, Butch.

It's probably true that I like games with a character named Jack, but Pirates, like a company, is so much more than one character. What we do every day takes a very large and dedicated group of people from our employees to our contractors and vendors - all working to **Make Pinball Great Again™**. This game is a tribute to all of their efforts.

We do it all for you so that you can play and love this creation for many years to come. **Be Warned, Matey**, this game, like the Ocean, is very wide and very deep. It will take all of your **Pinball** skills to navigate through to play the many characters, game modes and features that have been carefully thought out for you. They will put smiles on the faces of all who push the start button.

At Jersey Jack Pinball®, we pride ourselves on making games that become treasured like a Pirate's Chest, full of **Gold**. On behalf of everyone who helped to make this game become a reality, we thank you and wish you endless fun.

Best Regards,

Jack Guarnieri
Founder, Jersey Jack Pinball®

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Section A

Game Assembly & Setup



A.1 Unpacking Your POTC Game

1) Using wire cutters, remove all shipping bands from the outside of the carton, noting the side with the “TRUCK THIS SIDE ONLY” marking (see figure A1). With a utility knife and needle-nose pliers, carefully cut the tape and remove all staples along the seams of the carton’s top flaps, then fold them open (see figure A2). Remove the large, flat sheet of cardboard. Pull out the loose parts box (red in figure A2) and remove its contents. Check all loose parts against the packing list on this page.

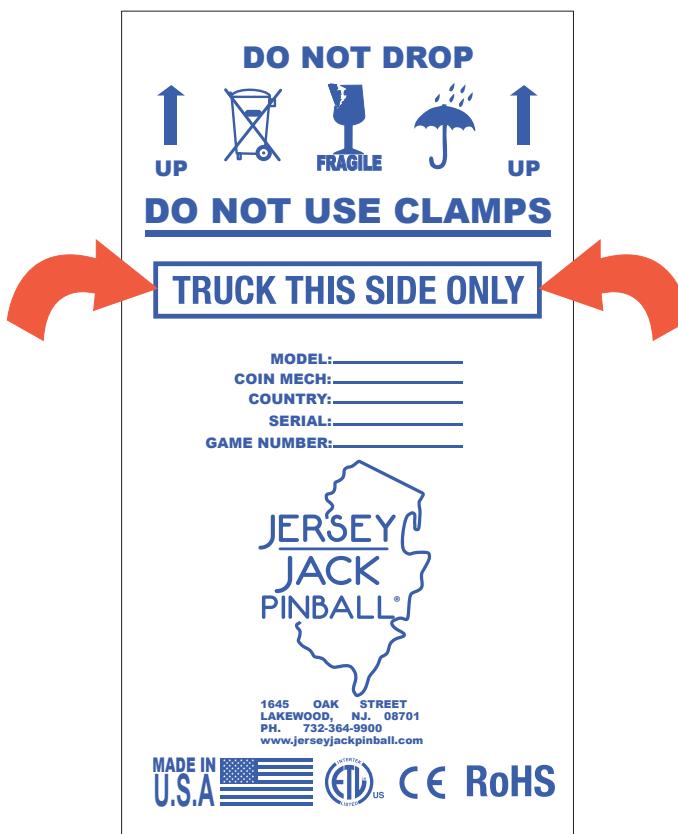


Figure A1. The “TRUCK THIS SIDE ONLY” side of the box.

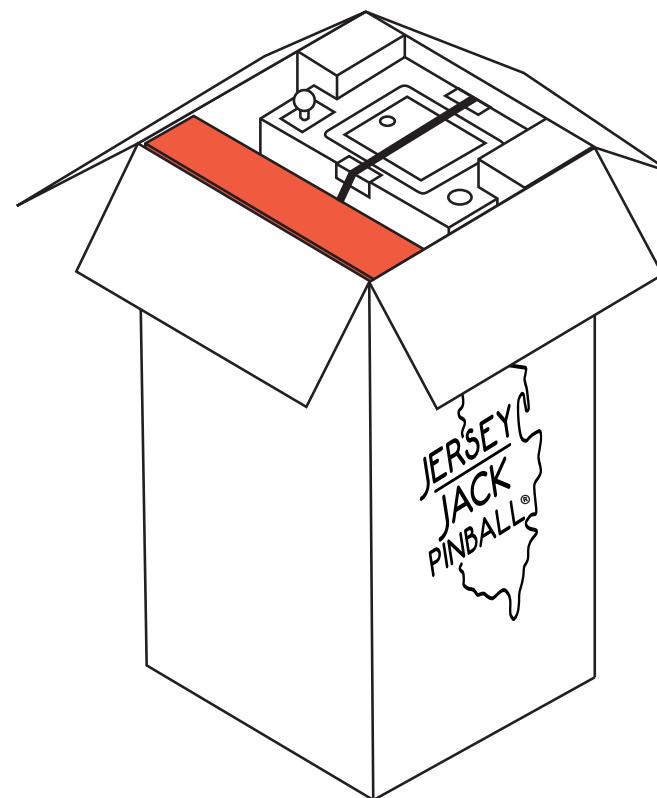


Figure A2. Opening the shipping carton.

Tools Required:

Wire cutters
Needle-nose pliers
Utility knife
Ratchet and 5/8" socket (or 5/8" wrench)
#2 Phillips screwdriver
Torpedo bubble level

Loose Parts Packing List

4 pinball machine legs, with levelers and tightening nuts
8 acorn-head leg bolts
1 plumb bob weight, with nylon wing nut
5 steel mirror-finish pinballs
1 USA line power cable
1 "L"-shaped, 5/16" hex key
assorted spare game decals
spare set of slingshot plastics
assorted plastic game key fobs
2 spare slingshot silicone rings
1 3/8" OD silicone mini post rubber
4 heavy, felt cabinet protectors
1 lasered topper (LE games only)

Note: If anything is missing from your loose parts, send an email to warranty@jerseyjackpinball.com for a replacement.

If you wish to save your shipping carton:

- 2)** With the help of at least one other person, carefully tip the carton over and lay it on its "TRUCK THIS SIDE ONLY" side (see figure A3a). Using the nylon strap as a handle (**DO NOT PULL ON THE GAME'S BALL SHOOTER!**), slide the game and packing materials out of the carton.

Note: You may need to spread a blanket or some other form of cushion under the game to protect the floor.

- 3) DO NOT CUT THE NYLON STRAP** holding the backbox down at this point. Remove the foam padding from the corners of the game and carefully stand it upright again (as it was in the carton during shipping).

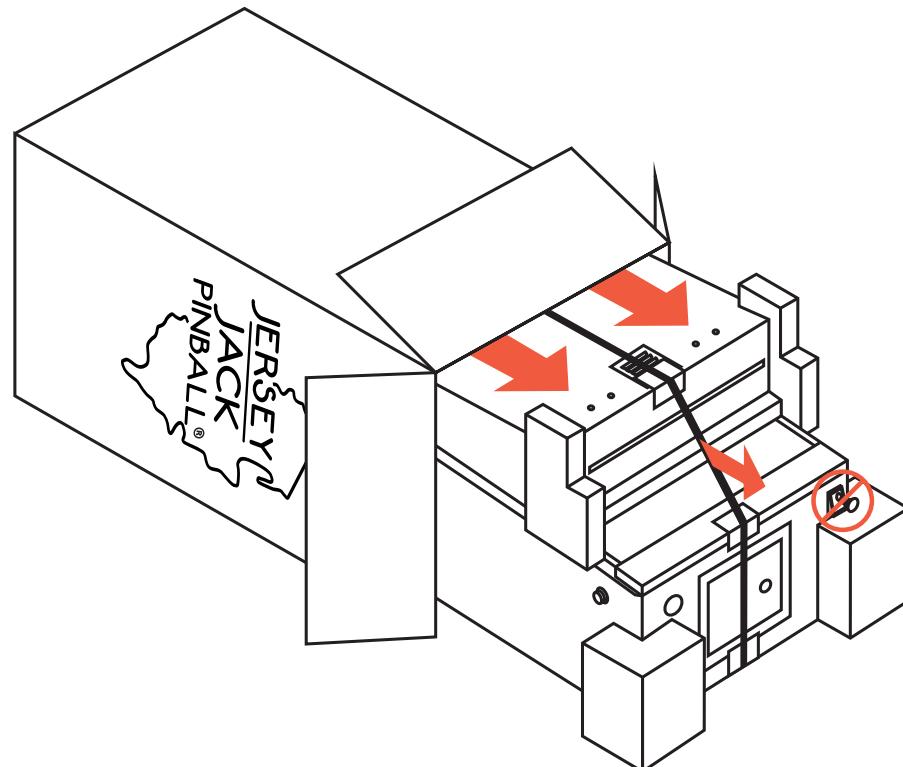


Figure A3a. Sliding the game out of the carton.

or

If you do not wish to save your shipping carton:

- 2)** Using a utility knife, remove the "TRUCK THIS SIDE ONLY" side of the shipping carton (see figure A3b). Carefully cut down the left and right sides of the box. Let the flap fall to the floor, then cut across the bottom edge (taking care not to damage the floor).

- 3) DO NOT CUT THE NYLON STRAP** holding the backbox down at this point. Remove the foam padding from the corners of the game.

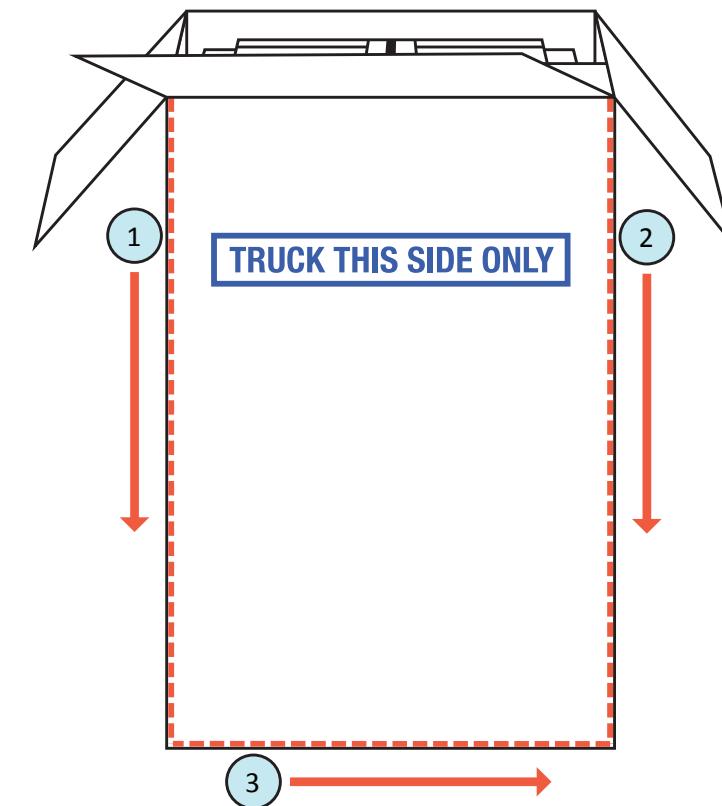


Figure A3b. Removing the "TRUCK THIS SIDE ONLY" side of the carton.

4) Locate the game's four legs. Add a tightening nut and a leg leveler to each leg as shown in figure A4: a) Install a tightening nut onto each leveler. Thread it all the way down, next to the foot of the leveler. b) Thread the leveler/nut into each leg until the tightening nut is against its underside. With the cabinet set up on a perfectly level surface, this should provide a playfield pitch of approximately 6.5°, front to back.

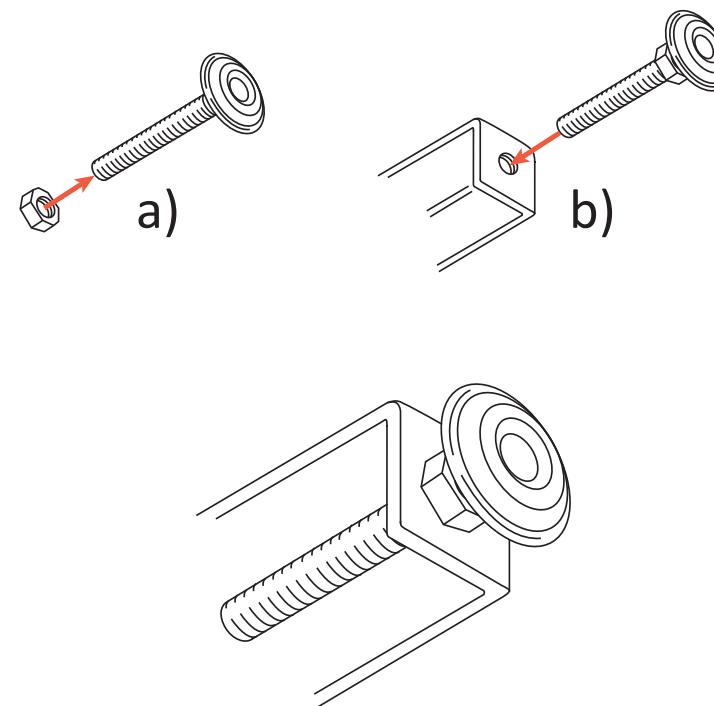


Figure A4. Installing a leg leveler and tightening nut.

5) Locate the eight acorn-head leg bolts in the loose parts. Thread 2 leg bolts through each leg and attach it to the cabinet (see figure A5). Using a 5/8" socket and ratchet or a 5/8" wrench, tighten the bolts firmly, while maintaining pressure (in the direction of the red arrow) on each leg.

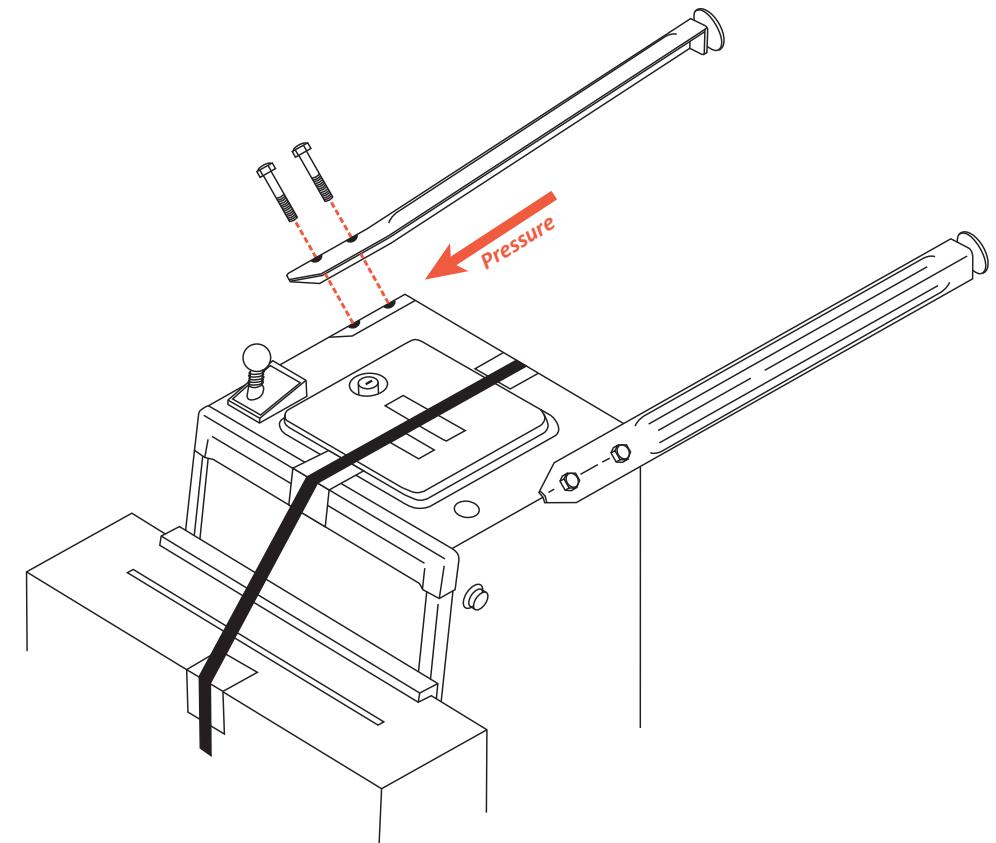


Figure A5. Installing the front legs and cabinet protectors.

6) With the help of at least one other person, carefully tip the game onto its front legs. Lift the rear of the cabinet and have two people hold it or place it on a sturdy support. As with the front legs, attach the two rear legs, using the four remaining acorn-head bolts. Tighten all bolts firmly, while maintaining upward pressure on the legs (see figure A6). Lower the game onto its four legs.

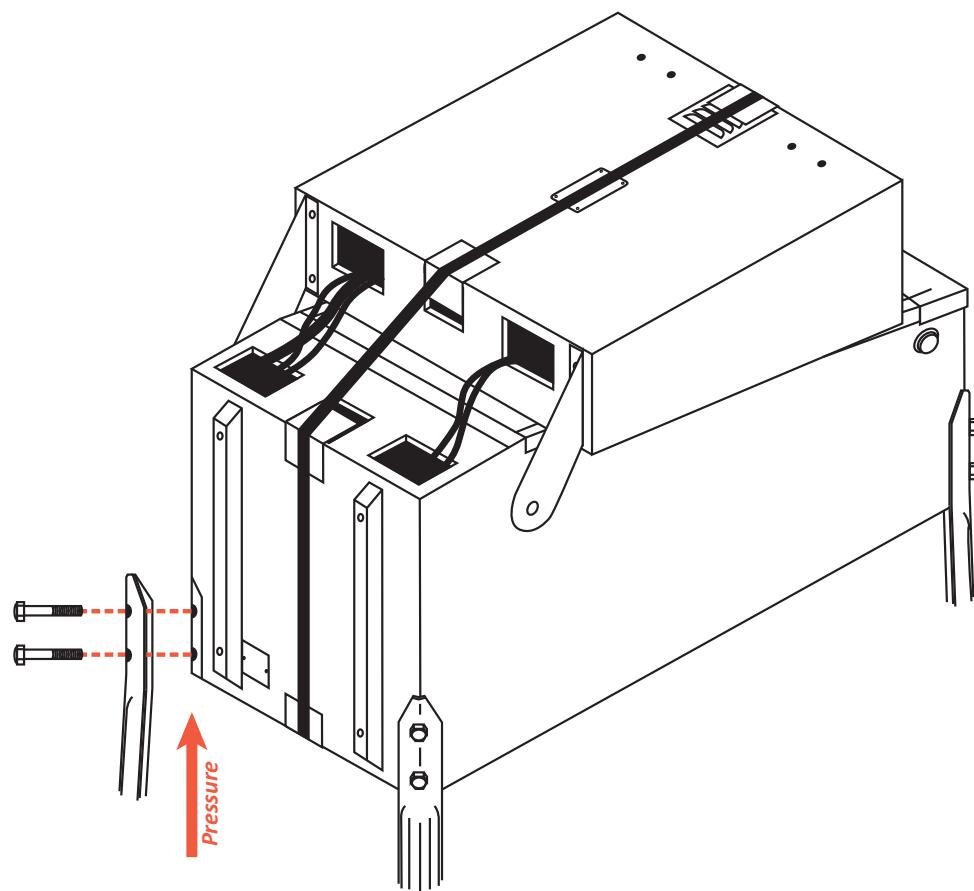


Figure A6. Installing the rear legs and cabinet protectors.

7) Using wire cutters, cut the nylon strap holding the backbox down (**CAUTION: PROTECT YOUR EYES** and have helpers/bystanders move away! The sharp ends of the cut strap will likely whip violently away from the game!). Remove the remainder of the packing material from the game and raise the backbox to its upright position (see figure A7). Ensure that the cables and wires in the neck of the game do not get pinched at any time during this process.

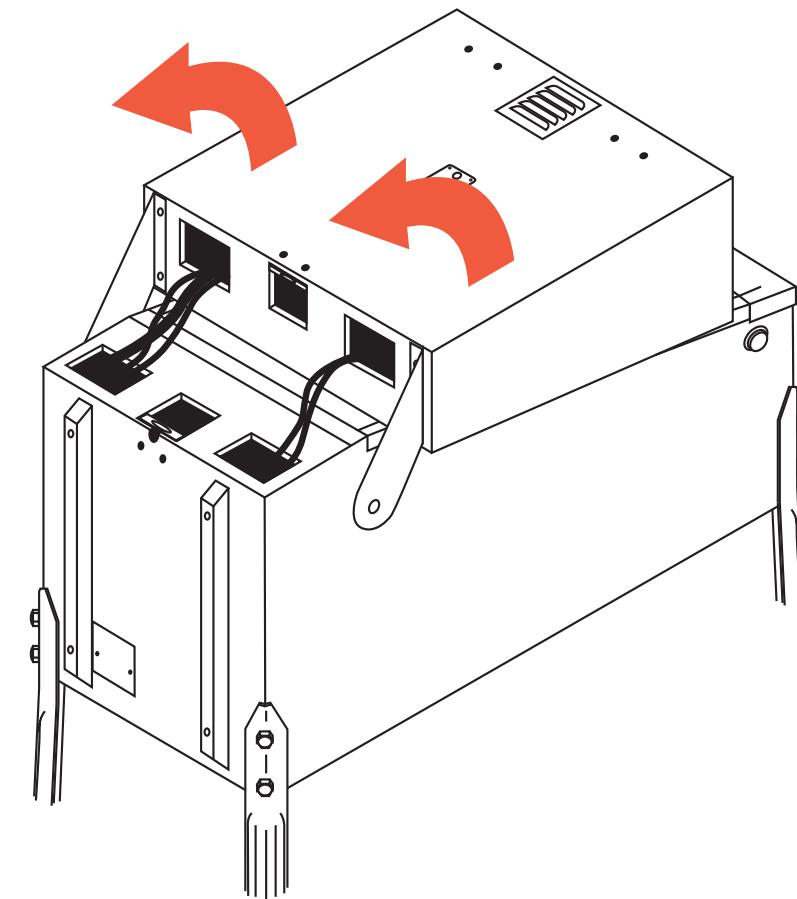


Figure A7. Raising the backbox to its upright position.

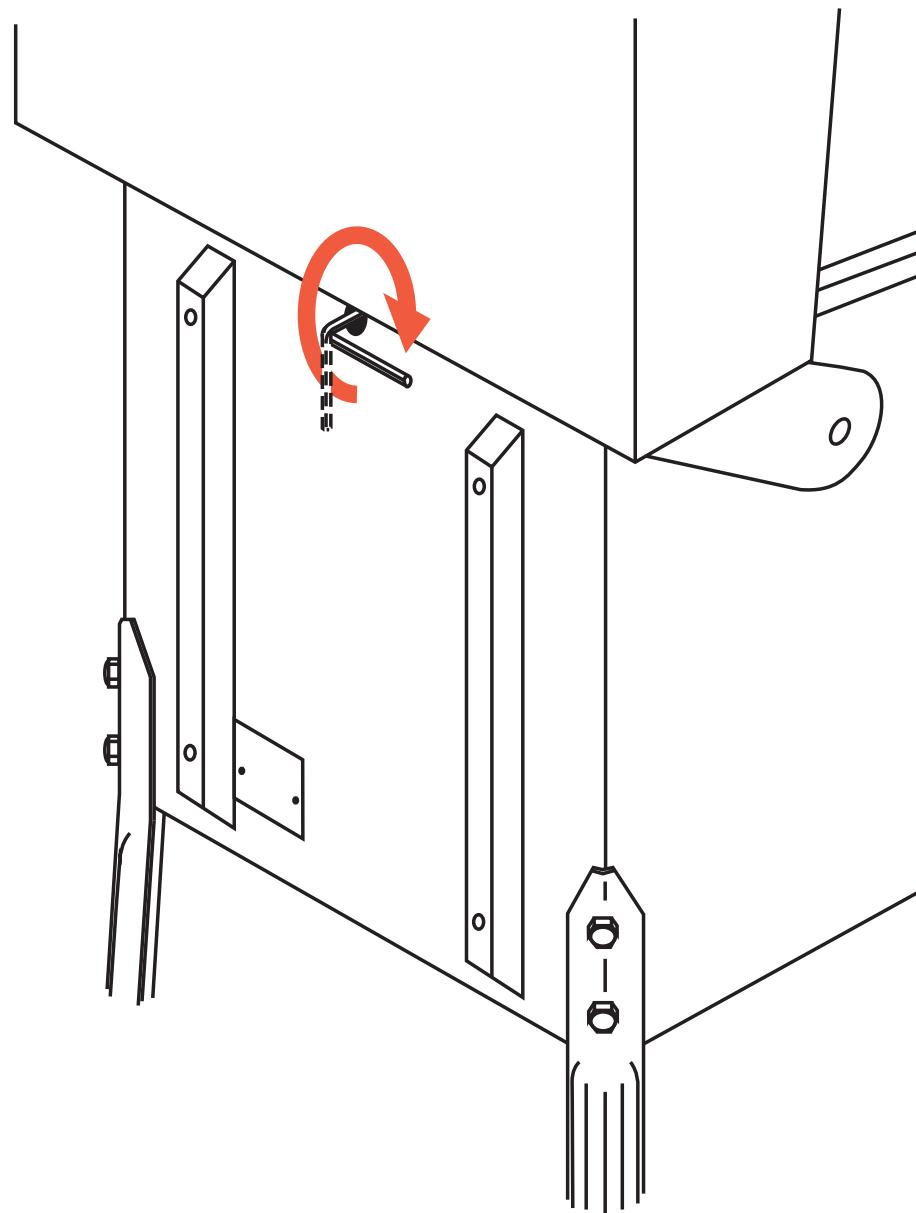


Figure A8. Locking the backbox in the upright position.

8) Locate the "L"-shaped, 5/16" hex key for the backbox Roto-Lock in the loose parts. Insert it into the hole at the base of the backbox and turn it a full 270 degrees, CW (see figure A8).

Note: When the Roto-Lock is in the fully locked position, the key will not turn any further in the CW direction.

9) Using at least two people, lift the game and move it to the intended play area.
DO NOT SLIDE LEGS ACROSS THE FLOOR.

10) You will find the coin door keys attached to the ball shooter, on the front of the game. Cut them loose with a pair of wire cutters. Remove the playfield glass: 1) open the coin door, 2) slide the yellow lockdown bar lever to the left, 3) lift the lockdown bar straight up and out, 4) CLOSE AND LOCK THE COIN DOOR (to prevent scratching of playfield glass), then 5) slide the playfield glass off of the front of the cabinet (see figure A9). Carefully set the glass aside. **CAUTION:** Lay the playfield glass flat or on a padded surface. NEVER place playfield glass, on edge, on a hard surface! The tempered glass could shatter!

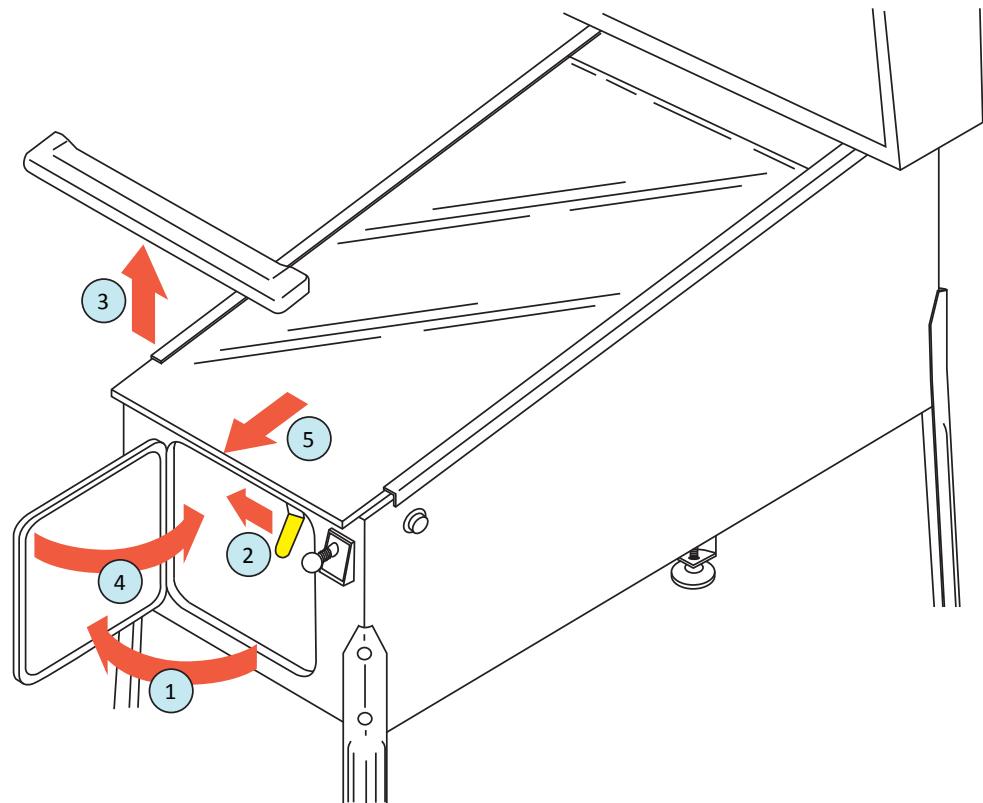


Figure A9. Removing the playfield glass.

11) Locate the game's five pinballs in the loose parts. Wipe the balls with a soft rag to remove any anti-rust compounds before use. Place all five balls in the ball trough (drop them onto the playfield, below the flippers, and allow them to drain). Level the game side-to-side by placing a bubble level on the playfield surface (top and bottom)

and adjusting the leg levelers and tightening nuts accordingly. When finished, secure the tightening nut against the underside of each leg.

12) Your Jersey Jack Pinball® playfield is designed to rest in four distinct positions in its cabinet for game play, cleaning and maintenance. Figure A10 shows the playfield in its standard position.

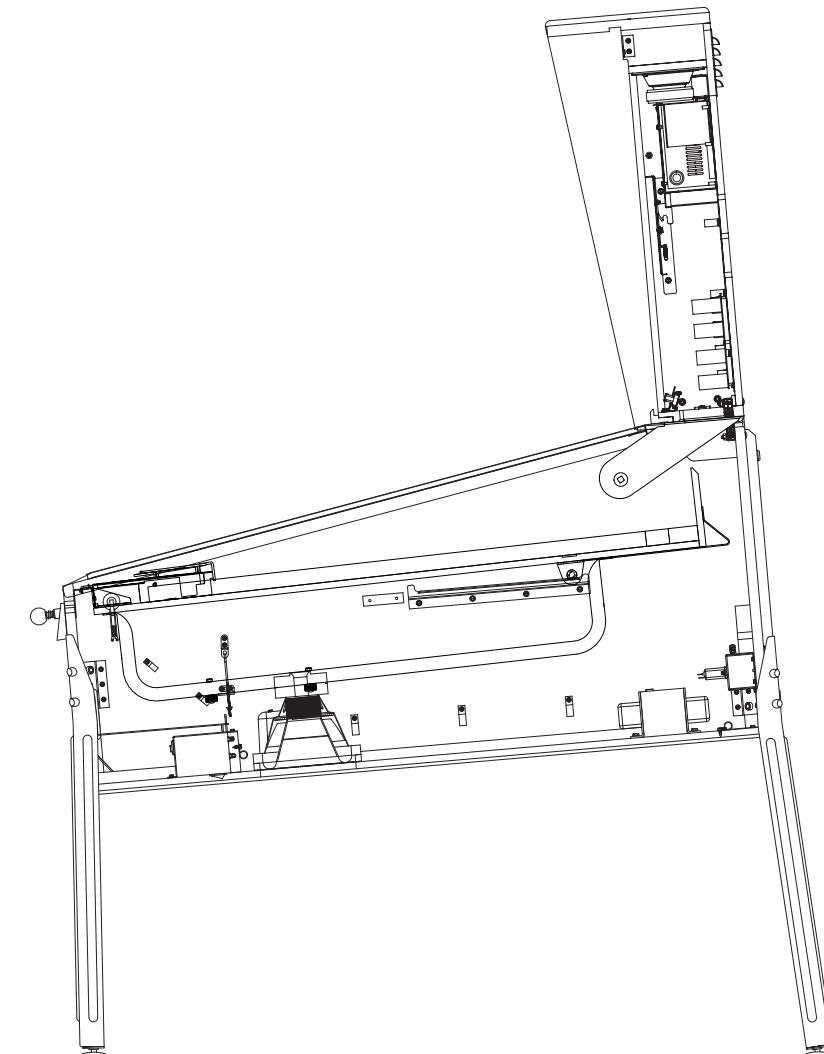


Figure A10. Playfield in the game play position.

13) Grasp the playfield under its bottom arch and swing it upward until the playfield support tubes underneath are fully visible (figure A11). Move the playfield to position 2 (figure A12). Pull it upward and outward until the first pair of feet reach the top of the lockdown bar receiver; then lower the playfield, resting the feet in the steel channel.

Note: The game has a safety mechanism to keep the balls in the trough from falling out when the playfield is lifted.

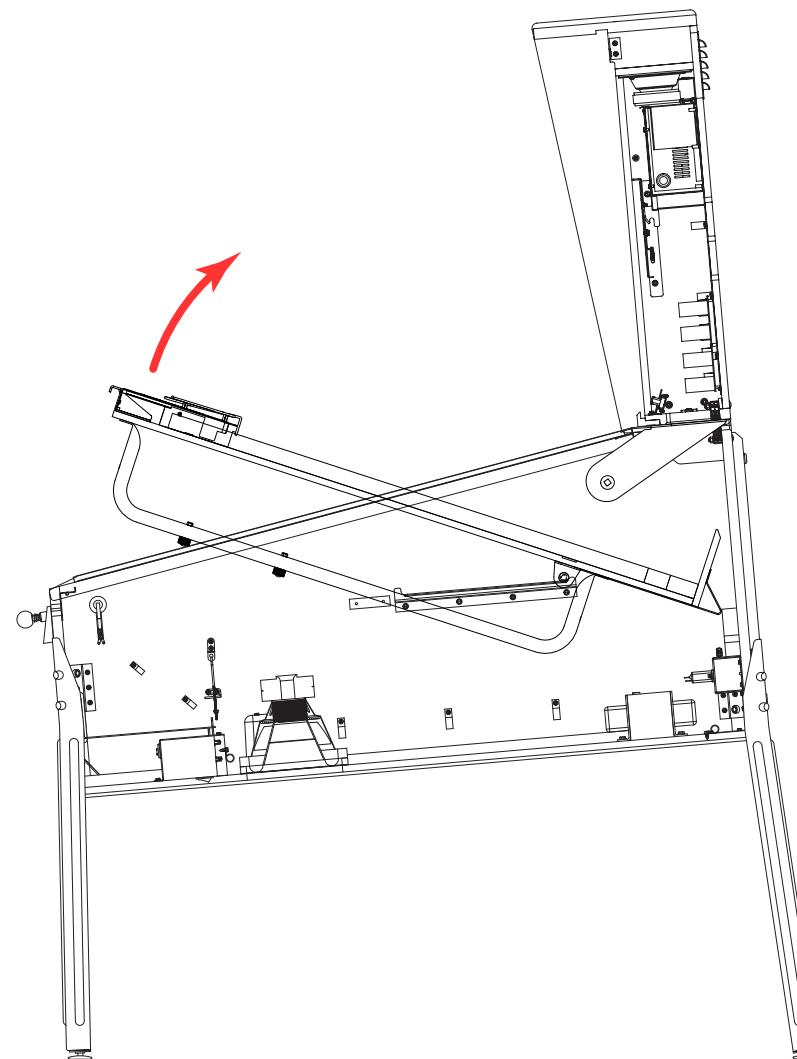


Figure A11. Swing the playfield upward.

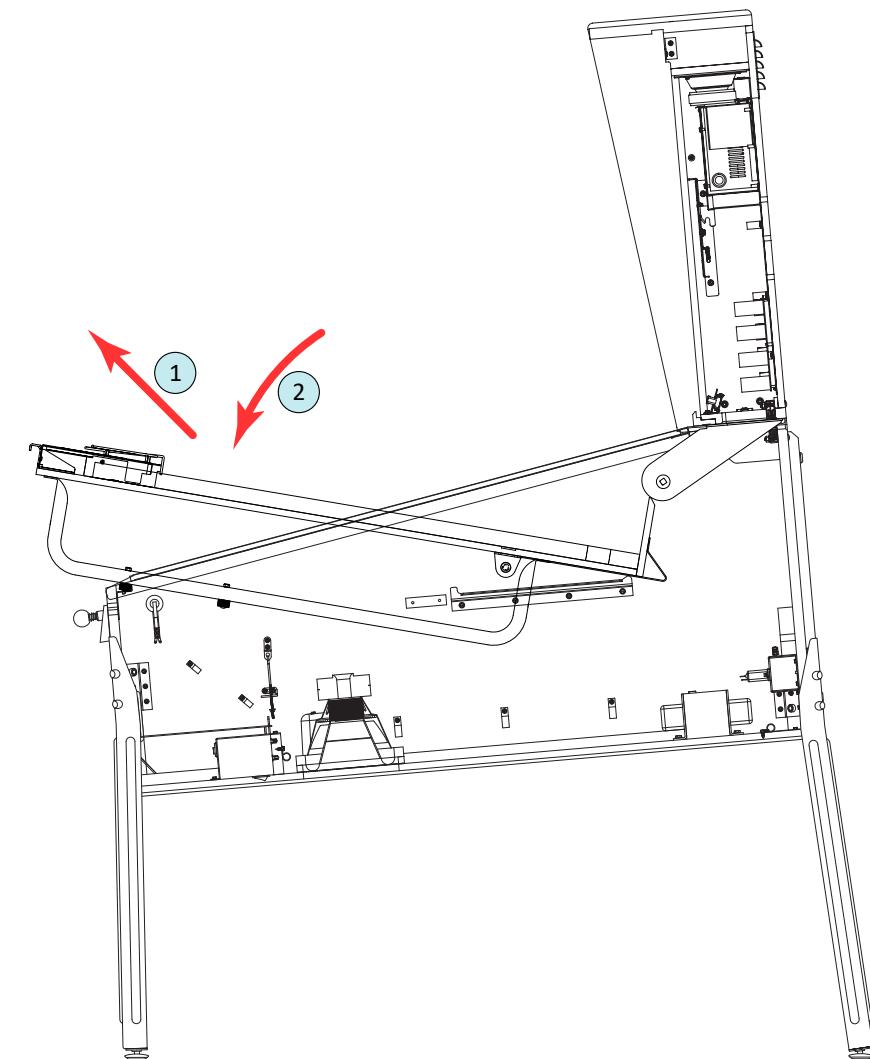


Figure A12. Moving the playfield to position 2.

14) Move the playfield from position 2 to 3 (figure A13). Pull it upward and outward until the second pair of feet in the support tubes reach the top of the lockdown bar receiver; again, lower the playfield, resting the feet in the channel. Remove any packing material from the playfield surface and/or shipping blocks from behind the back panel of the playfield/lower cabinet interior.

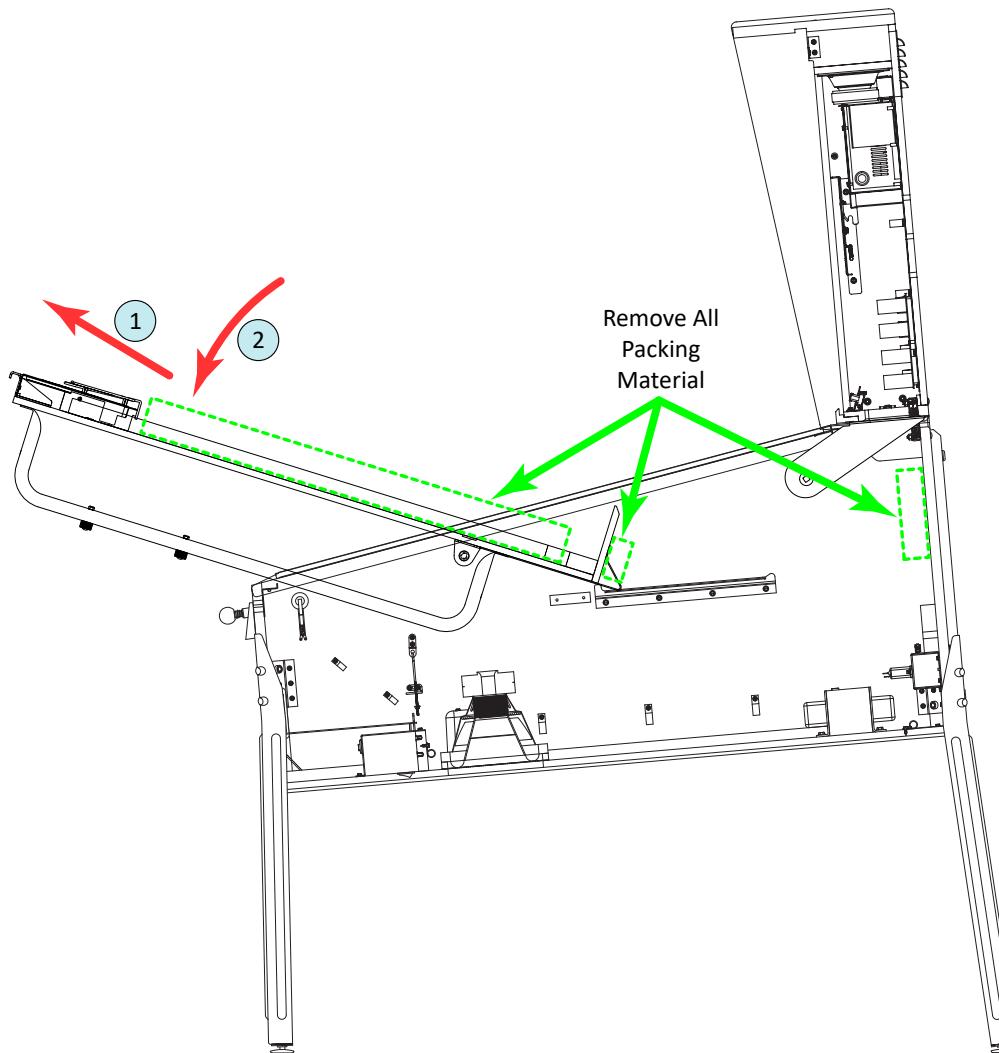


Figure A13. Moving the playfield to position 3; removing packing material.

15) Move the playfield from position 3 to 4 (figure A14). Grasp the two playfield support tubes and pull the playfield outward until the playfield support/slide bracket stop is reached; then swing the playfield up, carefully resting the bottom arch against the front of the backbox.

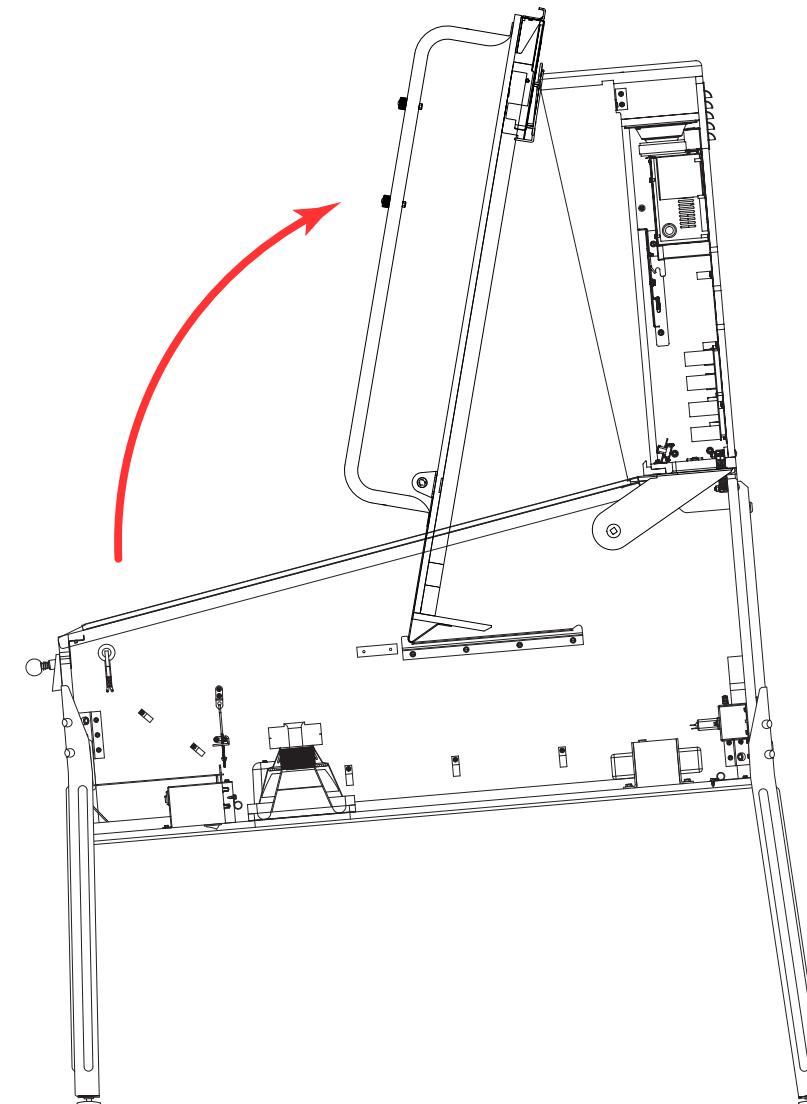


Figure A14. Moving the playfield to position 4.

16) Locate the plumb bob weight and nylon wing nut in the loose parts. Locate the plumb bob tilt hanger wire and contact brackets, mounted on the inside, left sidewall of the lower cabinet. Slide the weight onto the straight end of the hanger wire and thread the wing nut onto the shaft underneath it (figure A15). Raising the weight higher up the hanger wire (by tightening the wing nut underneath it) makes the tilt mechanism more sensitive; lowering the weight makes it less sensitive. Carefully lower the playfield and slide it straight back into the cabinet, ensuring that the two hanger brackets rest in the slots in the lockdown bar receiver channel. Carefully reinstall the playfield glass and lockdown bar by reversing the steps in **10)** above.

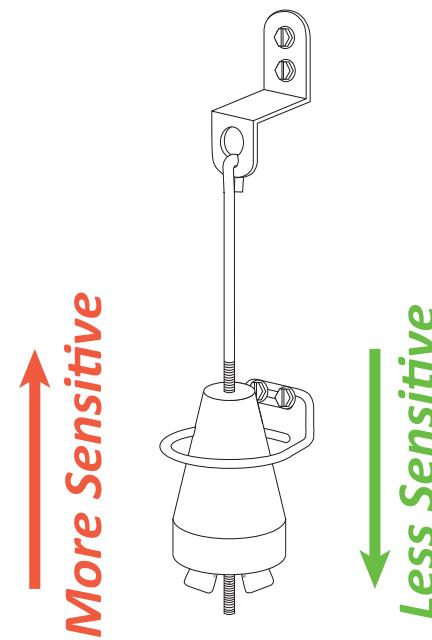


Figure A15. Assembled plumb bob tilt mechanism.

17) Locate the power cord in the loose parts. Remove the line cord cover plate from the rear of the lower cabinet (figure A16). Plug the female end of the power cord into the exposed receptacle, inside of the back of the machine. Replace the line cord cover plate and plug the other end of the power cord into a grounded wall outlet. **DO NOT CUT THE GROUND LUG OFF OF THE POWER CORD!**

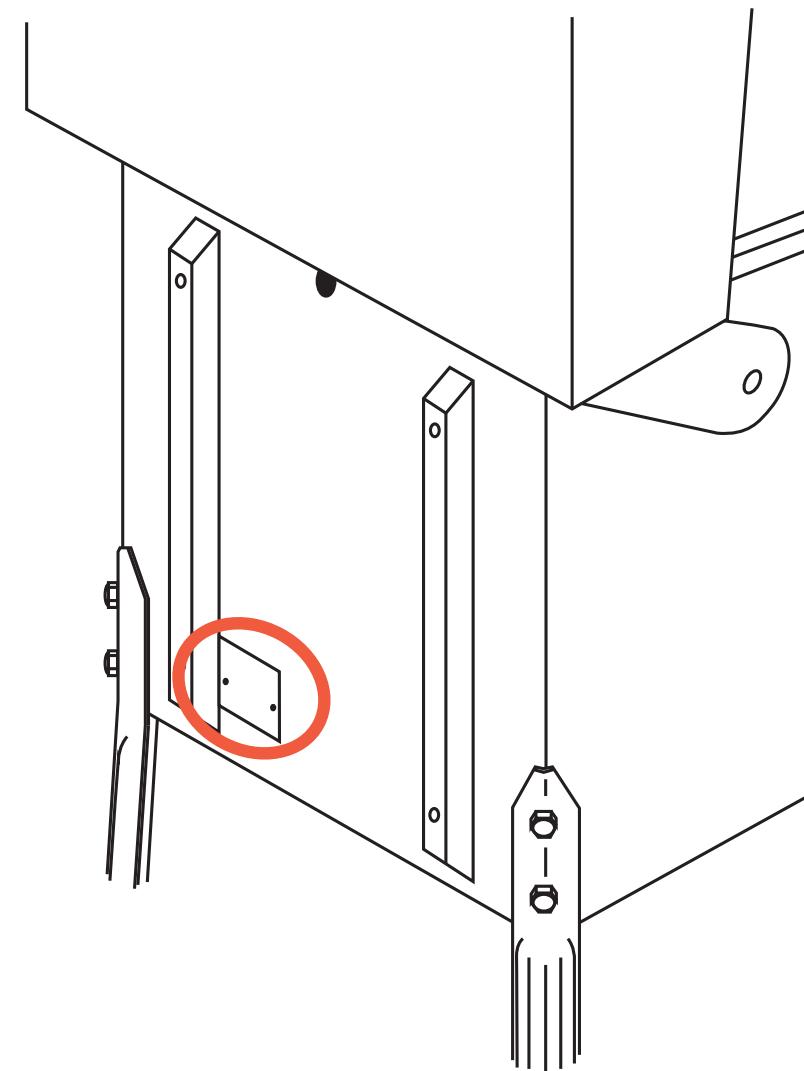


Figure A16. Line cord cover location.

18) Power up the game (the on/off switch is located under the cabinet, just behind the right front leg; it rocks in one direction to turn the game on and in the reverse direction to turn it off) and test it for proper operation. Adjust game settings as appropriate (see Game Menu System, Section B). Your game is ready to play!

19) A bubble level (figure A17) is attached to the playfield's right woodrail, next to the ball shooter lane, to indicate the optimal pitch of the playfield (back-to-front) for game play. Adjust the levelers and tightening nuts on the game's four legs until the top of the bubble in the level is just touching the second reference line, as shown in figure A17. This will provide a playfield pitch angle of 6.5°.

Note: Ensure that the playfield remains level, side-to-side, as you adjust its pitch.

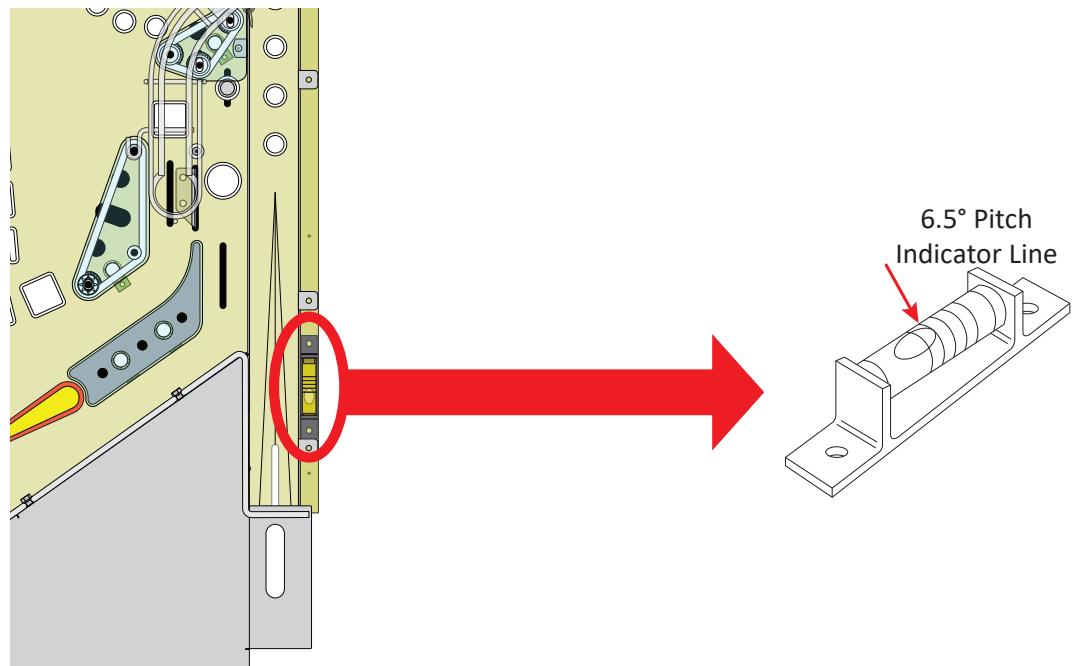


Figure A17. Playfield pitch bubble level.

Note: Before transporting the game, lower the backbox (figure A18). Insert the 5/16" hex key into the hole at the base of the backbox and turn it a full 270 degrees CCW. Ensure that cables and wires in the neck of the machine do not get pinched or pulled taut as the backbox is laid down. Place a large piece of cardboard (or the piece of foam used when the game was shipped) between the top lip of the backbox and the lower cabinet to protect the cabinet side rails. Tie or strap the backbox securely to the cabinet to prevent it from bouncing during transit.

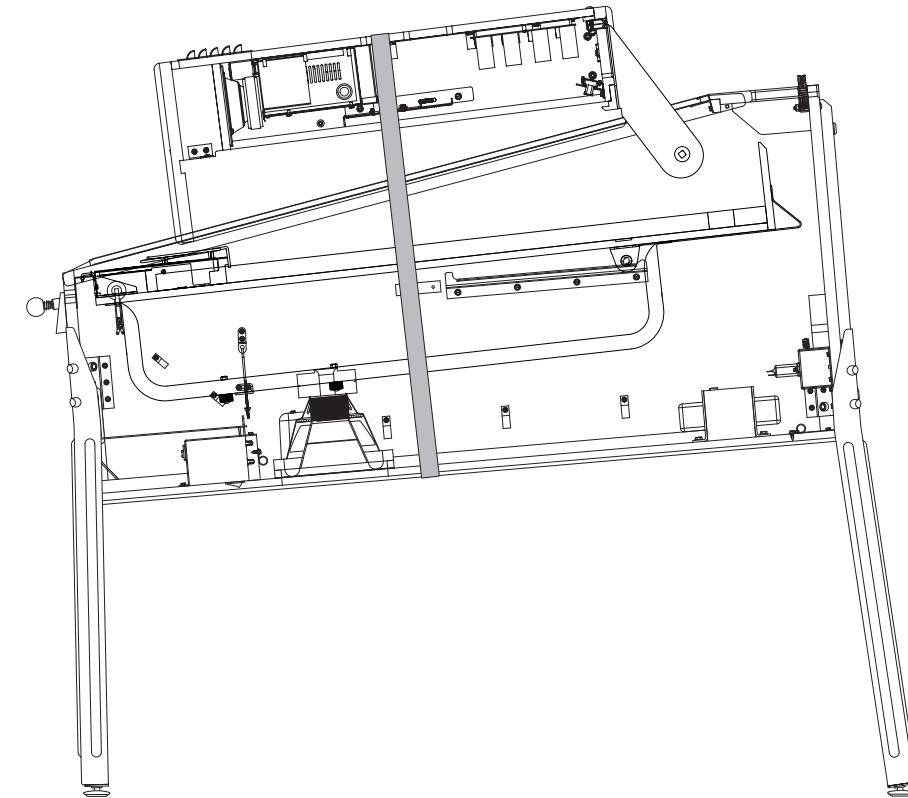


Figure A18. Transport game with the backbox lowered and secured.

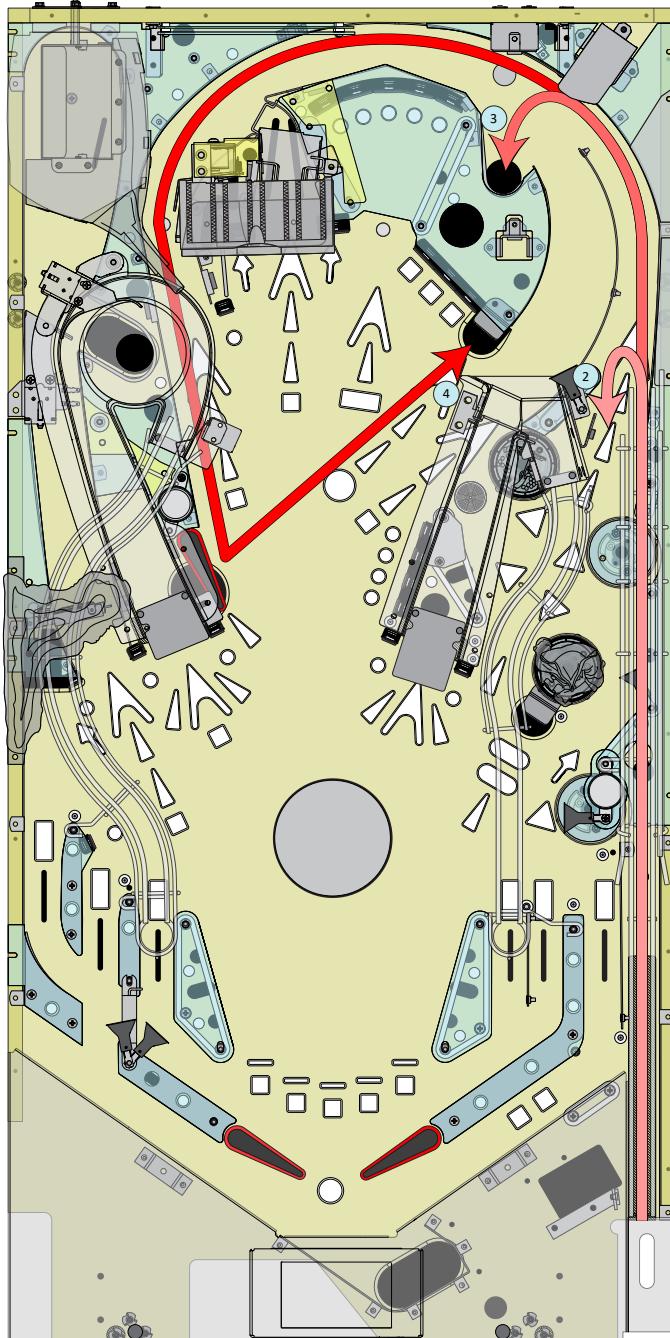
A.2 POTC Rules & Shot Maps

Beginning A Game

When you press the **Start** button on your POTC game, you will be prompted to choose your character (below). You select one of 22 possible characters, each with his/her own special game play "strengths", to help you along on your pinball journey. Use the flipper buttons to navigate through the character list. Select your character with a press of the **Action** button (located on the game's lockdown bar).

Note: In a multiplayer game, each player must choose a different character. That is, the character selected by player one will not be available to player two, three or four - just a little incentive to go first! Each player will be prompted to choose their character before their first ball.





Skill Shots

- 1) The strength with which you plunge the ball determines the skill shots available to you at the beginning of each ball. Each skill shot has its own benefits, helping you to achieve various stages and goals within the game. The more difficult the shot, the greater the reward!
- 2) If you plunge the ball lightly, you can drop the ball into the pop bumpers/upper sling area. This skill shot (below, left) awards points and increments the overall **Tortuga Mystery Level** by one (**Tortuga Mystery** will be explained in detail later in this section).
- 3) Plunge the ball with medium strength to send the ball toward the top of the playfield. If you are able to drop it into the subway entrance, beneath the **Black Pearl** mini playfield, you are awarded points and one stage of progress toward sinking the Dauntless with the **Black Pearl** cannon (below, center) and qualifying **The Curse of The Black Pearl Multiball**. You also get to board the **Black Pearl** mini playfield in an attempt to further your progress (more on this feature to follow).
- 4) A full plunge of the ball allows you to attempt a difficult secondary shot with the upper left flipper. Shoot the ball into the **MAP** hole to collect big points *and* trigger a spin of the Mao Kun Map (below, right). The resulting **Map Award** could just turn your game around (again, more on this feature later on)... Shoot the inner loop a few times before hitting the **MAP** hole for even BIGGER awards!

The award values increase with each skill shot made during a game, so *attempt one every time you launch a new ball into play!*





Chapters - Qualifying, Starting & Playing

- 1)** Characters and scenes from all five movies are incorporated into your POTC game; each movie has been divided into a number of chapters. There are five movie "skull shots" on the playfield (red inserts, opposite); hit these shots (red arrows, opposite) to qualify movie chapters. The 27" LCD shows a "cannon door" for each movie, across the top of the screen (below, left). With no chapters qualified, the door is "closed", displaying the associated playfield skull shot. As various movie chapters are qualified, the associated movie cannon doors will "open", and a small, colored skull will be displayed below each cannon barrel (see below, left). The most recently qualified movie chapter will be shown in front of each cannon barrel.

- 2)** When at least one chapter has been qualified, the **Start Chapter** insert (yellow insert, opposite) will illuminate. Make the center **Star Map** shot (blue arrow, opposite) to start a chapter. The chapter select up-post will capture the ball and the buried magnet will whip the ball around, eventually selecting a random chapter for you to play.

- 3)** A brief chapter introduction will be displayed (below, center), with the required character shots for the chapter listed across the top of the screen. The associated character inserts (green arrow inserts, opposite) will flash and a chapter timer will begin. When you hit a required shot, the character insert will go out on the playfield and a highlight circle will be placed around the character's portrait in the LCD shot list (below, right). Make all of the shots, in the allotted time, to complete a chapter - a colored checkmark will be placed in one of the slots below the appropriate movie's cannon door, on the LCD. If you do not complete the chapter, an 'X' will be displayed in the slot instead.



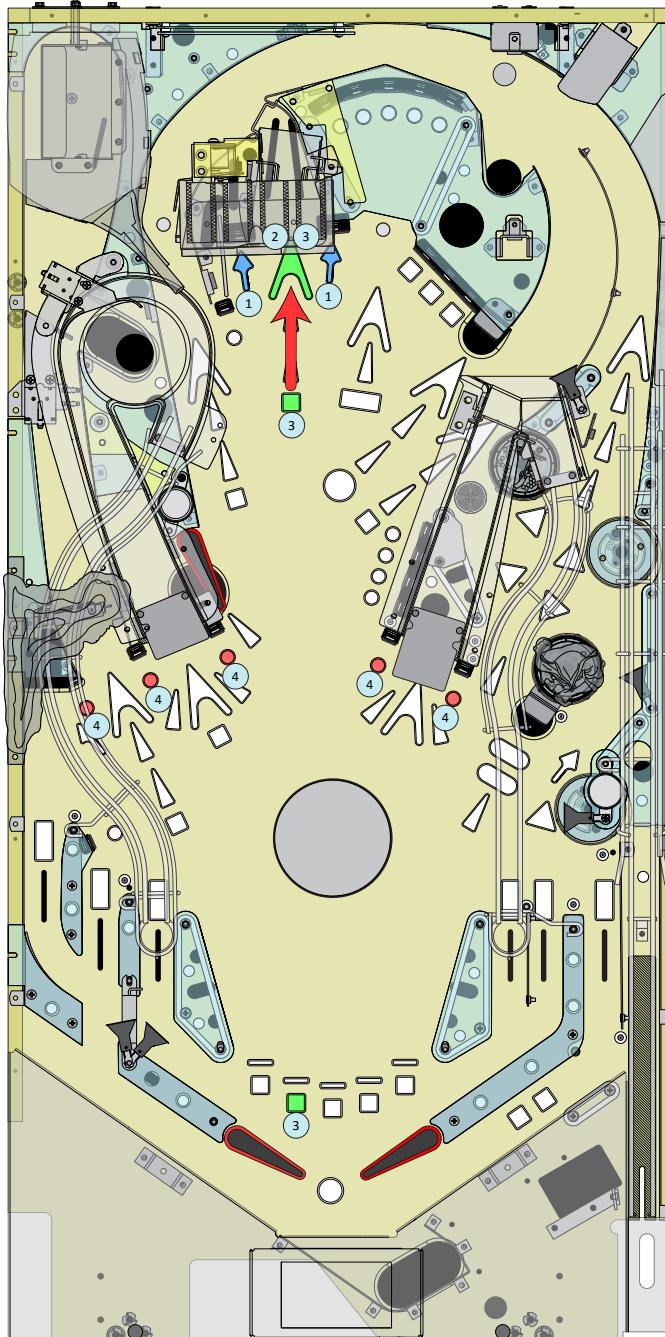


The Curse Of The Black Pearl (Movie 1) Multiball

The Curse Of The Black Pearl Multiball requires a three-stage process to qualify. Use the skill shot (at ball launch), the **Black Pearl** access ramp (green arrow, opposite) or the left orbit shot (red arrow, opposite) to board the **Black Pearl** and progress through the three stages. A successful **Black Pearl** skill shot will instantly complete the current stage for you.

- 1) Stage one: Repeatedly shoot the lighted spinners on the **Black Pearl** mini PF (blue arrows, opposite); you are searching for a target. The spinner lights turn green to indicate that you have intercepted the enemy ship, The Dauntless.
- 2) Stage two: The **LOAD** and **CANNON** target inserts (green circle inserts, opposite) will flash green. Hit either of these targets to load the cannon (and open the cannon gate, in the left corner of the mini playfield).
- 3) Stage three: The **LITE FUSE** insert (green arrow insert, opposite) will flash green. Shoot the ball through the open gate to light the cannon fuse. Time your shot carefully and use the **Action** button to fire the ball at the target ship, across the back of the playfield (yellow arrows, opposite). If you shoot the ball through the bullseye hole in The Dauntless, you will destroy it *and* qualify **The Curse Of The Black Pearl Multiball**. If you miss, you will have to reload the cannon and try again! Two hits on the ship (without going through the bullseye hole) will also destroy it and qualify the multiball.
- 4) The **Movie 1** square inserts & Jackpot arrow insert (yellow inserts, opposite) will flash yellow and white. The **Movie 1** path on the LCD screen will also indicate that the **Movie 1 Multiball** is ready (below, left). Shoot the left orbit (red arrow, opposite) to begin **The Curse Of The Black Pearl Multiball** (below, center). During the 3-ball multiball (below, right), board the **Black Pearl**, reload the cannon and fire upon The Dauntless for Jackpots. Each bullseye scores a Super Jackpot!

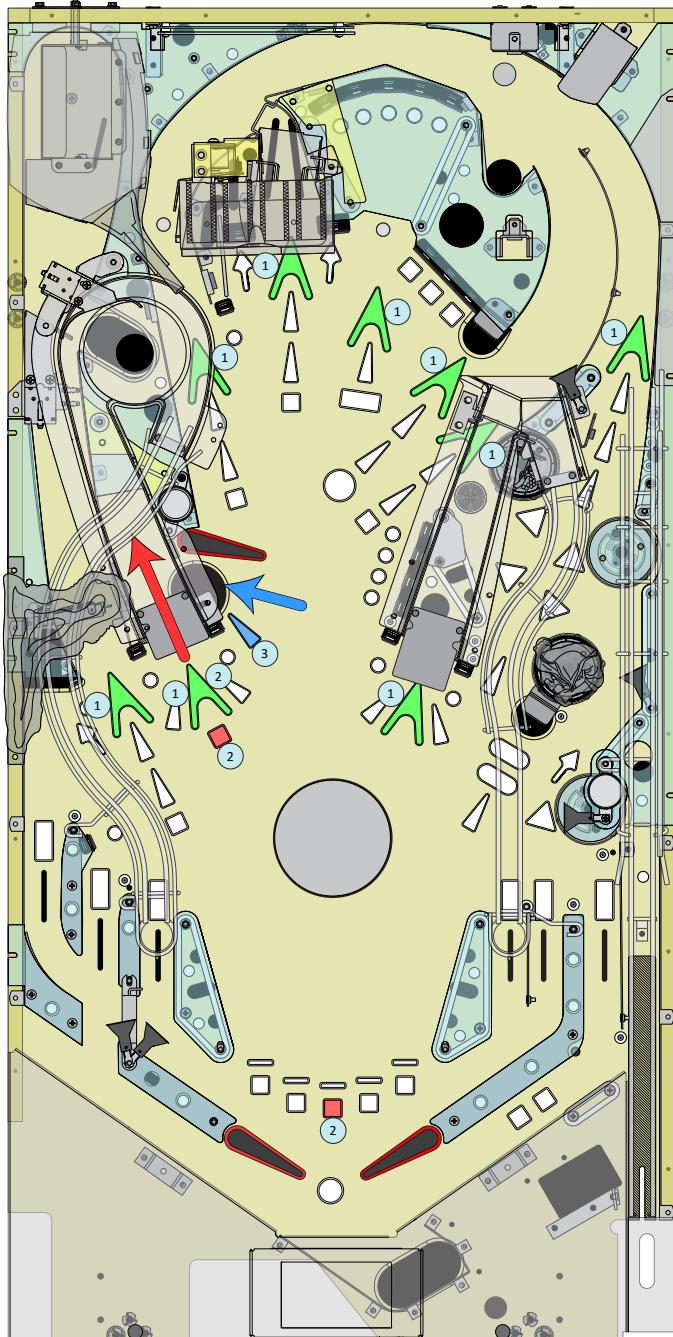




Dead Man's Chest (Movie 2) Multiball

- 1)** Load balls into the treasure chest to qualify **Dead Man's Chest Multiball**. Start by shooting both the **LOAD** and **CHEST** targets (blue inserts, opposite). The insert for a target that hasn't been hit will be flashing green; the insert for a target that's been hit will be solid green. When both targets have been hit, the 3-ball lock forks (under the treasure chest) will be raised, through the playfield.
- 2)** The treasure chest lane Jackpot arrow insert (green Jackpot arrow insert, opposite) will flash green. Shoot the lane (red arrow, opposite) to load a ball inside the treasure chest, a 3-ball physical lock. A new ball will be served into play (attempt a skill shot!).
- 3)** Repeat the two steps above twice more to finish qualifying **Dead Man's Chest Multiball**. When the forks go up to lock the third ball in the chest, the **Movie 2** square inserts & Jackpot arrow insert (green inserts, opposite) will flash green and white. The **Movie 2** path on the LCD screen will also indicate that the **Movie 2 Multiball** is ready (below, left).
- 4)** When you lock the third ball in the treasure chest, **Dead Man's Chest Multiball** begins (below, center). The balls are released from the chest, into play. The **2X, 3X, 4X, 5X & 6X** multiplier target inserts (red inserts, opposite) will flash green and white. The number of Jackpot shots that will be lit (in green) depends upon which of these targets is hit first (**2X** lights two Jackpots, **3X** lights three Jackpots, etc.). During the 3-ball multiball (below, right), hit all of the lit Jackpot shots to light the Super Jackpot shot in the treasure chest lane (red arrow, opposite). Collect the Super Jackpot, hit another multiplier target, light new Jackpot shots and go for another!

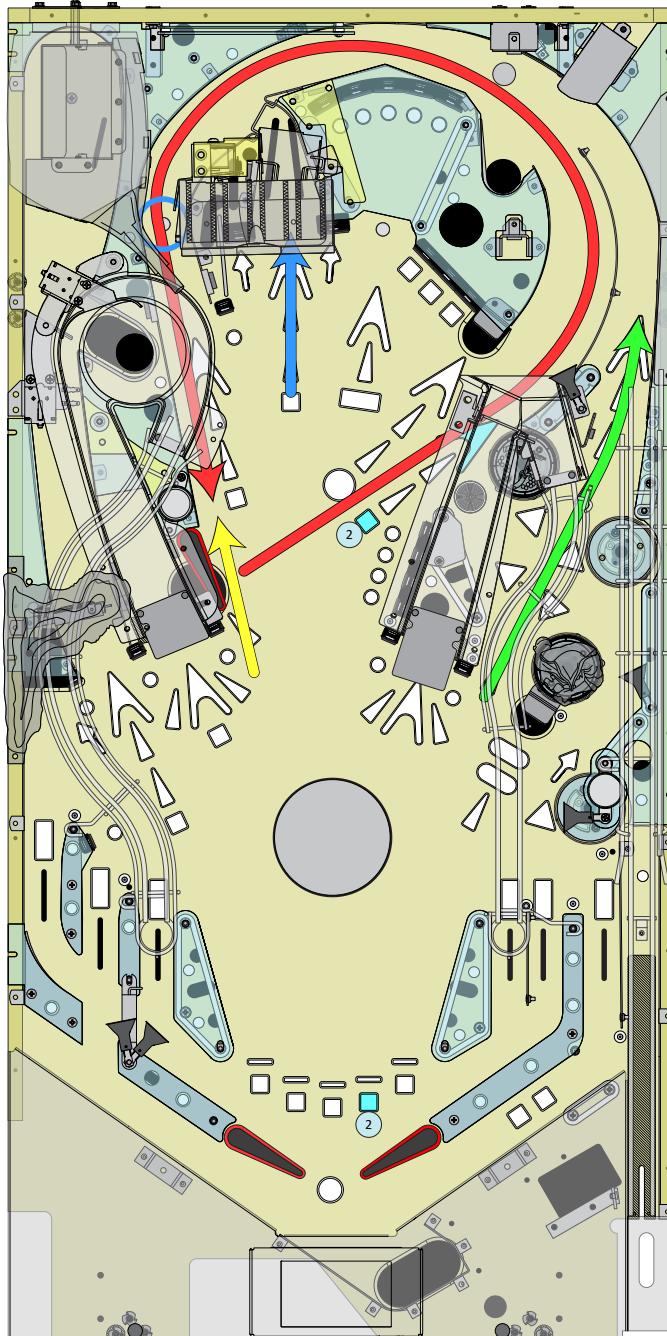




At World's End (Movie 3) Multiball

- 1) Shoot the nine primary, Jackpot arrow shots (green inserts, opposite) to collect all nine pieces of eight and qualify **At World's End Multiball**. The insert for a pieces of eight shot that hasn't been collected will be unlit; a collected shot's insert will be solid red. When one shot remains, its insert will flash red. Progress in collecting pieces of eight is also shown in the center of the LCD (below, left). Uncollected pieces of eight are monochrome and stationary; collected pieces of eight are colored and spinning.
- 2) The **Movie 3** square inserts & Jackpot arrow insert (red square & green Jackpot arrow inserts, opposite) will flash red and white. The **Movie 3** maelstrom on the LCD screen will also indicate that the **Movie 3 Multiball** is ready (below, left).
- 3) Shoot the Maelstrom ramp (red arrow, opposite) to begin **At World's End Multiball** (below, center). During the 3-ball multiball (below, right), shoot the **Maelstrom Ramp** for a Jackpot. This will light the **Bayou** shot (Tia Dalma, blue insert & arrow, opposite) for a Super Jackpot. Collect the Super Jackpot and repeat this process as many times as you can!

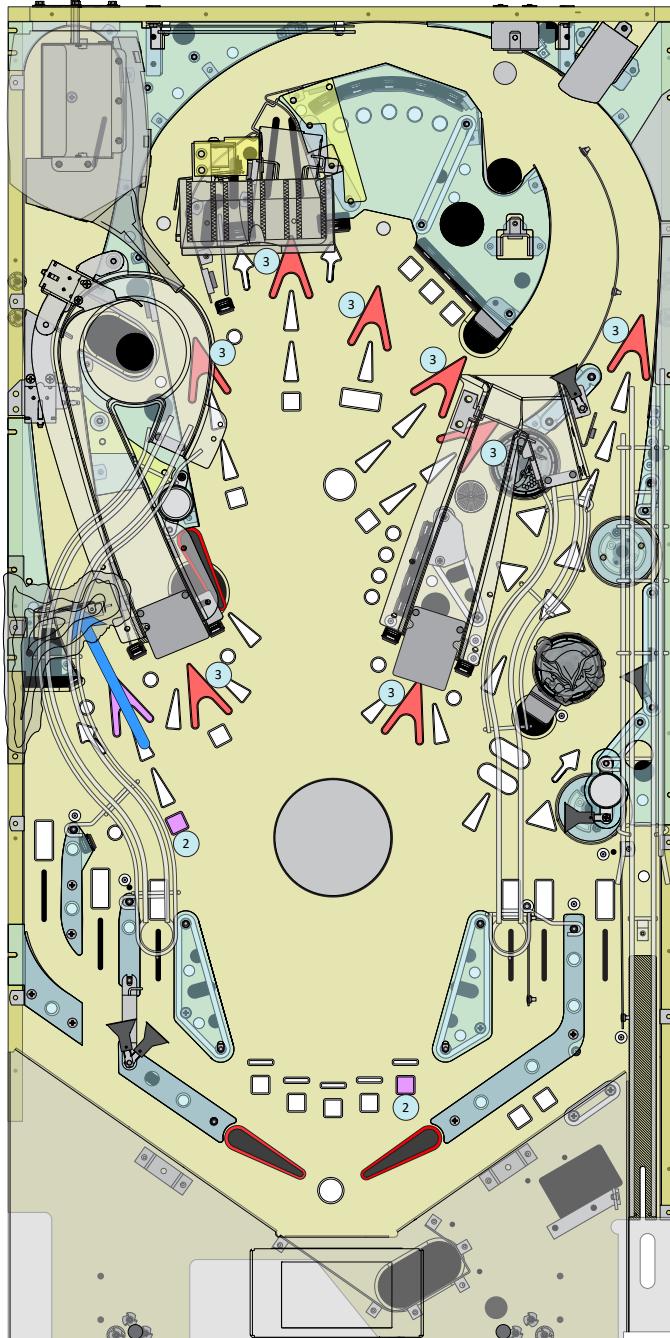




On Stranger Tides (Movie 4) Multiball

- 1)** Using the upper left flipper, shoot the inner loop shot (red arrow, opposite) five times, non-consecutively, to qualify **On Stranger Tides Multiball**. To clarify: if you shoot the loop three times, one after the other, that counts as *one* loop.
- 2)** When the five distinct loop shots have been made, the **Movie 4** square inserts & Jackpot arrow insert (cyan inserts, opposite) will flash cyan and white. The **Movie 4** path on the LCD screen will also indicate that the **Movie 4 Multiball** is ready (below, left).
- 3)** Shoot the loop a sixth time to begin **On Stranger Tides Multiball** (below, center). During the 2-ball multiball (below, right), shoot the inner loop (red arrow, opposite) to score a Jackpot. Shoot a combination shot: through the chest lane (blue arrow, opposite), then around the inner loop (red arrow, opposite) for a Double Jackpot score. Shoot a different combination shot: around the right orbit (green arrow, opposite), then around the inner loop (red arrow, opposite) for a Triple Jackpot score. If you collect *all three* Jackpots during your multiball, the next ball shot through the inner loop will be captured by the left orbit up-post and held, in place (blue circle, opposite). You can then shoot the left orbit shot (yellow arrow, opposite), hit the up-post and "newton ball" the captive ball back around the inner loop to collect a Super Jackpot award. Good luck!

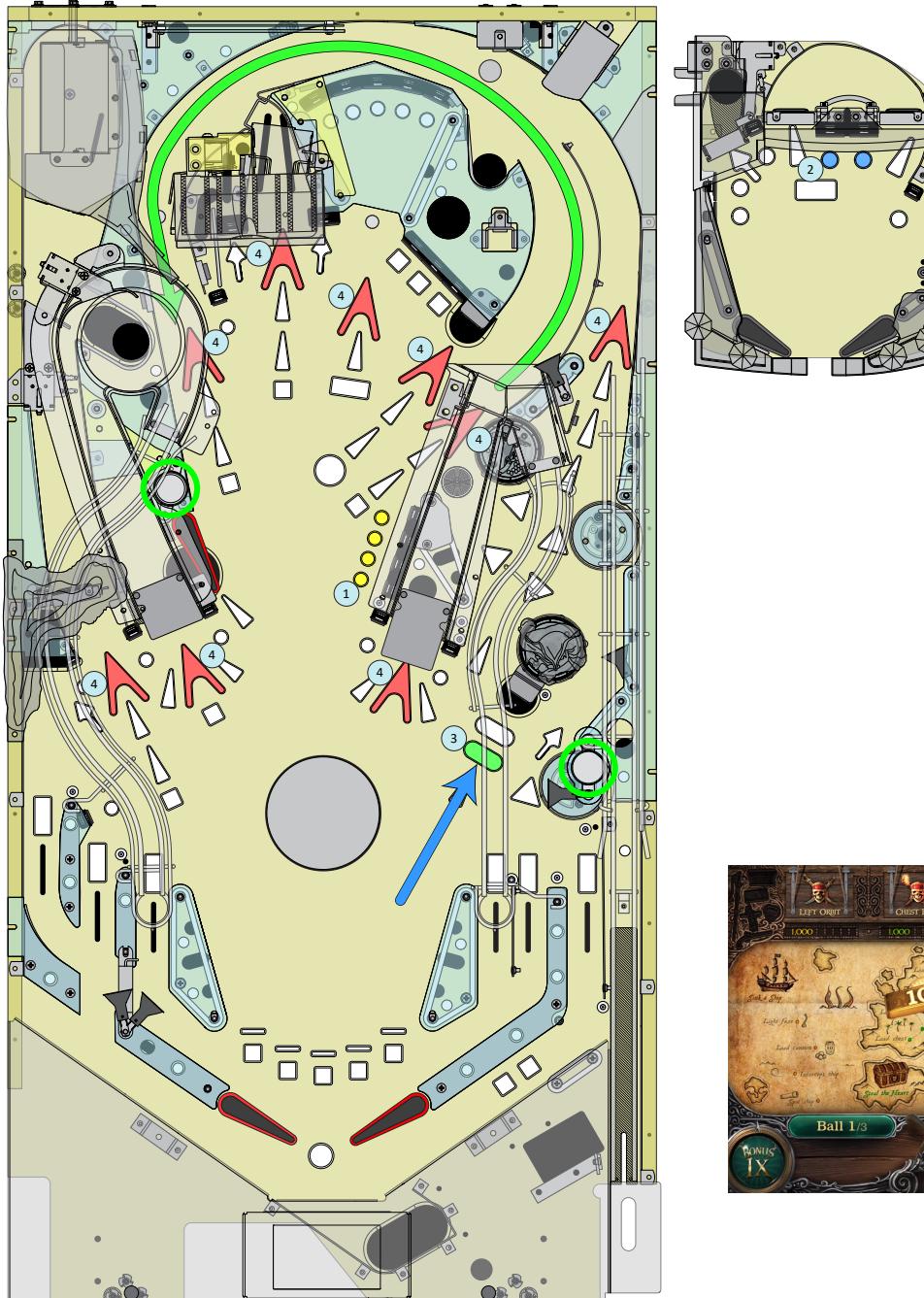




Dead Men Tell No Tales (Movie 5) Multiball

- 1) Shoot the left turnaround loop to qualify **Dead Men Tell No Tales Multiball**. The objective is to spin the **Devil's Triangle** spinner a predefined number of times (established in a **Dead Men Tell No Tales Multiball** difficulty setting).
- 2) When the appropriate number of spins have been achieved on the **Devil's Triangle** spinner, the **Movie 5** square inserts & Jackpot arrow insert (violet inserts, opposite) will flash violet and white. The **Movie 5** path on the LCD screen will also indicate that the **Movie 5 Multiball** is ready (below, left).
- 3) Shoot the full turnaround loop (not just as far as the **Devil's Triangle** spinner) to begin **Dead Men Tell No Tales Multiball** (below, center). During the 2-ball multiball (below, right), shoot the roving Jackpot shot (moving between the red Jackpot arrow inserts, opposite) to score a Jackpot. This will light the full turnaround loop shot again for a Super Jackpot. Hit the Super Jackpot to start the process all over again, with a new roving Jackpot shot.

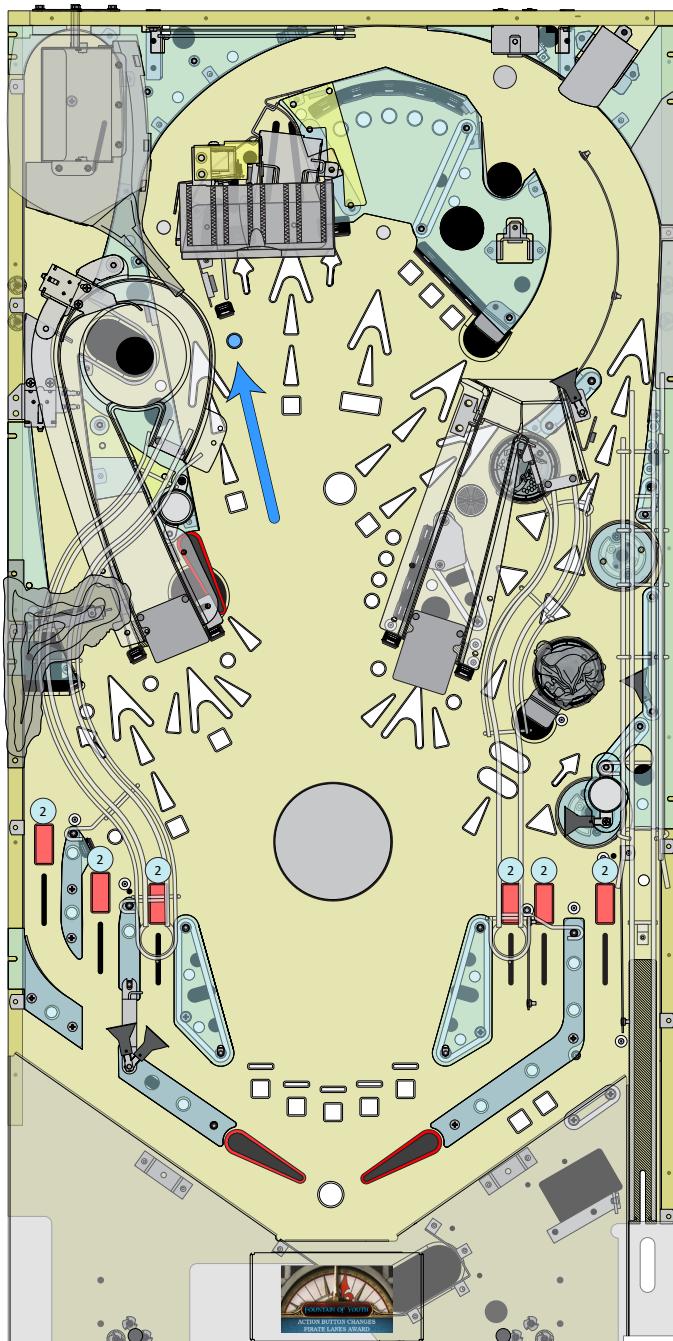




Collecting GOLD & Tortuga Multiball

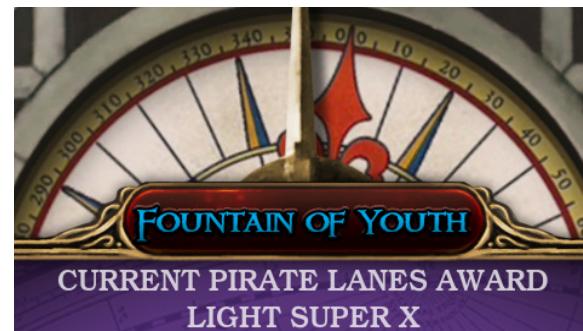
- 1)** One of the primary purposes for the **Action** button is to collect gold pieces during a game. When one of the **GOLD** targets (yellow inserts, opposite) is hit, a number of gold pieces are "tossed" onto the LCD screen (below, left). Simultaneously, the two flasher domes on the playfield (green circles, opposite) "sparkle" yellow and white. To "collect" the gold, release one of the flipper buttons and hit the **Action** button - once for each piece of gold on the screen. The gold remains on the screen for a short period of time (the flasher domes and gold pieces will turn red as time is running out), so grab them before they disappear! Your collected gold progress is shown in a circle, in the lower right corner of the LCD screen (below, left).
- 2)** There are several ways to multiply the number of gold pieces tossed onto the LCD screen when **GOLD** targets are hit. One multiplier is the inner loop shot (green arrow, opposite). Make this shot several times, in succession, then hit the **GOLD** targets to vastly increase your gold take. Also, when all **GOLD** targets are lit (you've spelled **G-O-L-D**) the next take will be doubled. Simply hit each **GOLD** target - or hit the **SPOT** and **GOLD** targets on the **Black Pearl** (blue inserts, opposite) to get a letter spotted on the main playfield - until all **G-O-L-D** inserts are lit. Then be prepared to clean up, the next time you shoot the **GOLD** targets!
- 3)** Collect 50 pieces of gold to qualify **Tortuga Multiball**. The **Tortuga Multiball** insert (green insert, opposite) will flash green. Shoot the **Tortuga VUK** (blue arrow, opposite) to begin the multiball (below, center).
- 4)** During the multiball (below, right), every Jackpot arrow shot on the playfield (red inserts, opposite) is a Jackpot shot. There will be a number of bottles on the LCD, in the lower right corner, under the flaming **Tortuga** sign. Each Jackpot shot made will break a bottle. Break all of the bottles, then shoot the **Tortuga VUK** (blue arrow, opposite) for a Super Jackpot. Repeat this process to see how many Super Jackpots you can collect!

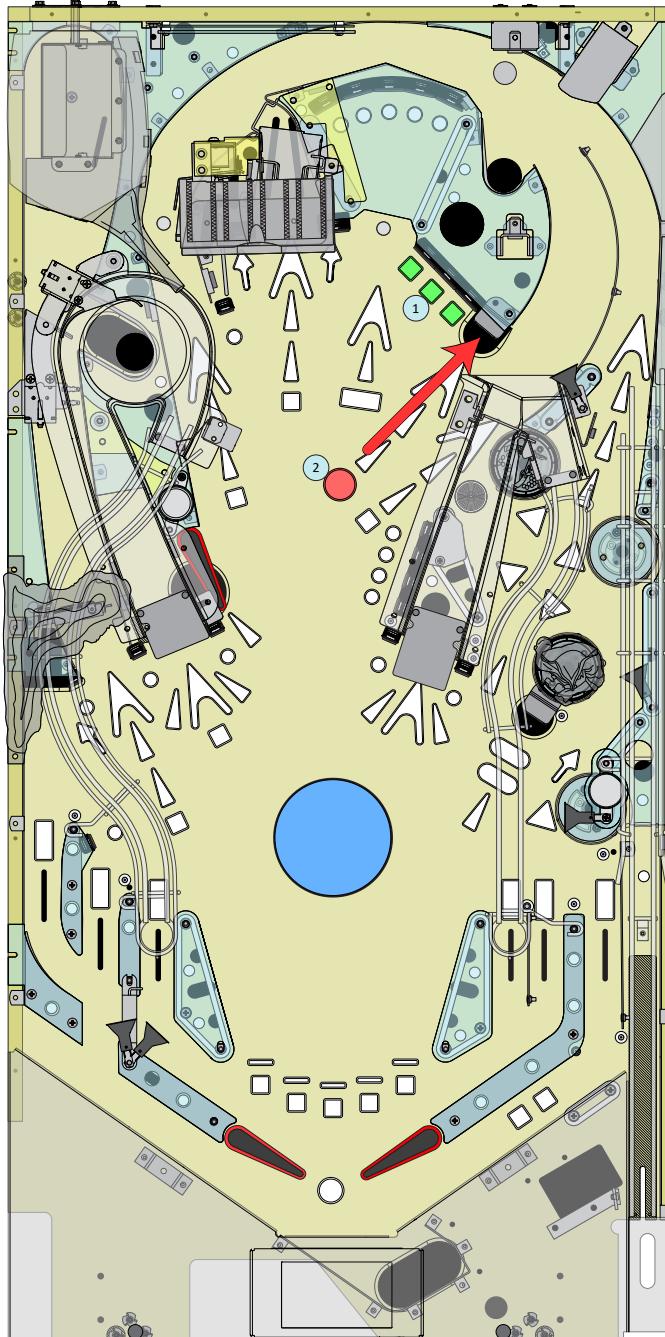




The Compass & PIRATE Lanes

- 1)** Your POTC game has a built-in compass, in the game's bottom arch, to help show you the way during your pinball adventure. The compass will always point you in the direction of "your heart's desire" - the most valuable current shot on the POTC playfield (below, left). When in doubt, take a quick glance down at the compass for some good "guidance"!
- 2)** The compass is also integrated into the game's **PIRATE** lanes feature. Across the bottom of the playfield, there are six return lanes and outlanes, three on either side of the main flippers. Each lane has an insert above it (red inserts, opposite), with one letter of the word **PIRATE** printed on it. Use the flipper buttons to move the lights/letters around, as the ball comes down return wire ramps or is kicked out of **The Depths** scoop. Completing the **PIRATE** lanes will light the **PIRATE** target insert, in front of the treasure chest (blue insert, opposite).
- 3)** The bottom portion of the compass displays the current **PIRATE** lanes award (below, left). You can cycle through the list of available awards, using the **Action** button, and select the one you would like to shoot for (below, center). Simply complete the **PIRATE** lanes, then shoot the lit **PIRATE** target (blue arrow, opposite) to earn the currently selected award (below, right). Every time you complete this process, the list of awards gets more lucrative, so choose your award carefully and make **PIRATE** spelling/collecting a priority!

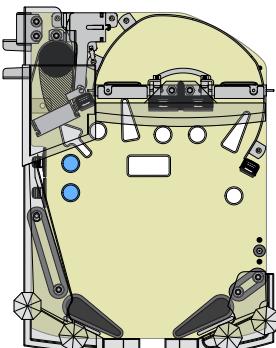
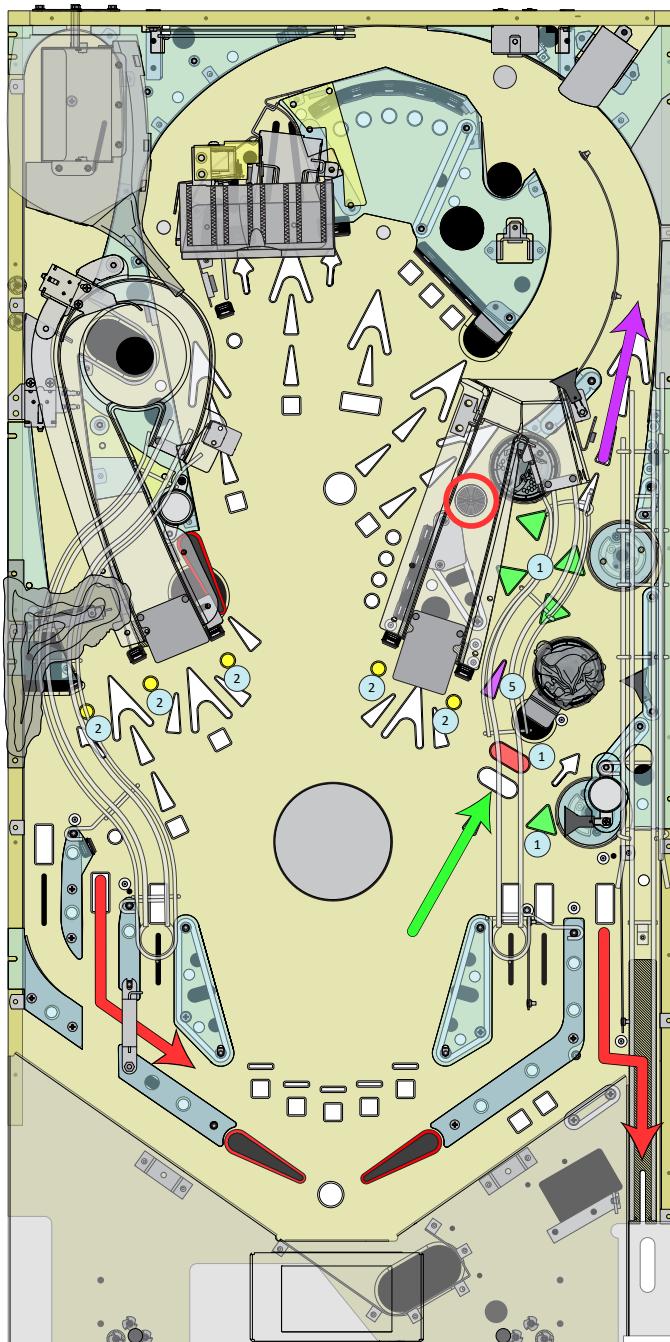




MAP Targets, The Spinning Disc & The Map Award

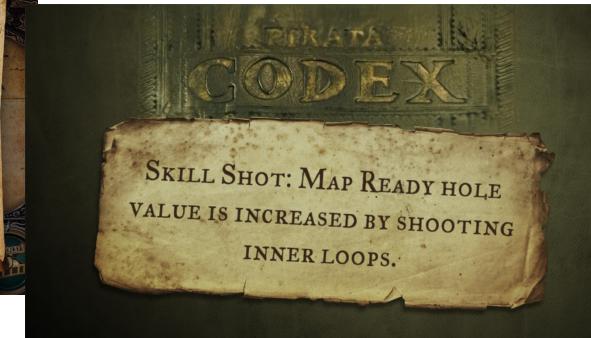
- 1)** The **MAP** targets (behind the green inserts, opposite) are integrated with the Spinning Map disc on the main playfield (blue circle, opposite). When you hit a **MAP** target, the disc will spin, sporadically, for a period of time (and that **MAP** letter insert will remain lit, orange).
- 2)** When you've hit all of the targets (you've spelled **M-A-P**), the **Map Ready** insert (red insert, opposite) will flash orange. From this point on, the disc will continue spinning, sporadically, until you shoot the **MAP** subway entrance hole (red arrow, opposite). Make this shot for a spin of the Mao Kun Map, followed by a **Map Award** (below, left). The ball will be held, in the subway, while the map randomly spins on the LCD to determine your award (below, center). What will you get *this* time?
- 3)** Not all **Map Awards** are created equal! Some are obviously better than others; some even affect other players in the game. One of the possible outcomes is plundering points (below, right) or gold pieces from one of your opponents. One player can even steal another player's character identity - and his/her game play "strengths" along with it. Recall that you can get a spin of the map with a well-timed skill shot as well. **Map Awards** add a great deal of excitement, unpredictability - and FUN - to a game, so make strategic, frequent use of the **MAP** targets and the **MAP** hole!

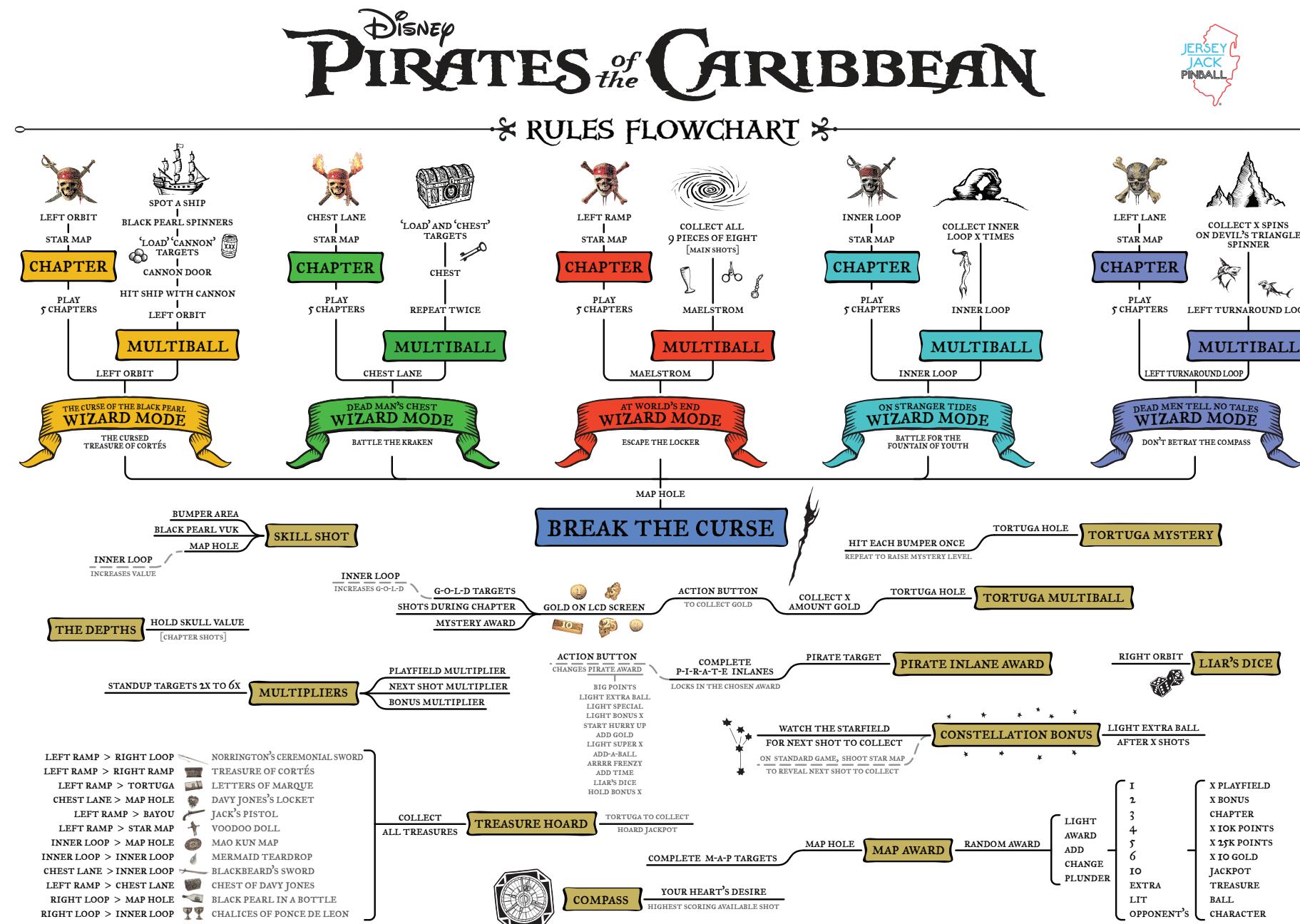




Tortuga Mystery Awards & Other Cool Features!

- 1) The four pop bumpers are integrated with the upper slingshot to define/maintain a relative level for mystery awards. The five pop bumper/slingshot inserts (green inserts, opposite) all begin a game lit magenta (level one). Each time one of them is hit, its insert is incremented one color level (magenta - pink - violet - blue - cyan - green - yellow - orange - red - white). The pop bumper rollover button (red circle, opposite) will increment the level of the lowest color insert by one. When all five inserts reach (at a minimum) a certain color, the associated **Tortuga Mystery Level** is increased to that level. Recall that a well-timed skill shot can raise the overall mystery level by one as well. When a mystery award is qualified, the **Tortuga Mystery** insert (red insert, opposite) will be lit, corresponding to the current mystery level color. A shot into the **Tortuga VUK** (green arrow, opposite), when lit, collects a random award from the current **Tortuga Mystery Level** list (below, left). The five inserts are then reset to zero (turned off). The higher the mystery level, the more lucrative the awards list, so shoot the pop bumpers to build up that mystery level - and wait as long as you possibly can to collect!
- 2) On the **Black Pearl**, shoot the **BONUS** and **X** targets (blue inserts, opposite) to light **2X-6X** multiplier targets on the main playfield (yellow inserts, opposite). The first time you complete the **Black Pearl BONUS and X** targets, the main playfield **2X** target will be lit. If uncollected and you complete **BONUS and X** again, both **2X** and **3X** will be lit on the main playfield - and so on, up to **6X**. Hitting a lit target will multiply your end-of-ball bonus by that amount (**2X-6X**).
- 3) When your ball starts down an outlane - and all appears lost - remember that a strategic nudge can "convince" the ball to return to play (red arrows, opposite). Give it a try next time; what do you have to lose (other than your bonus)?
- 4) Special CODEX "Protips" are available on the LCD screen (below, center), between balls played, to help you improve your game. The tips can be turned ON or OFF in the Game Settings menu.
- 5) Play as Davy Jones or advance the **PIRATE** lanes award to qualify **Liar's Dice** (violet insert, opposite & below, right), the game within the game. Shoot the right orbit (violet arrow, opposite) one you've qualified the game to try your hand!







Section B

The POTC Menu System



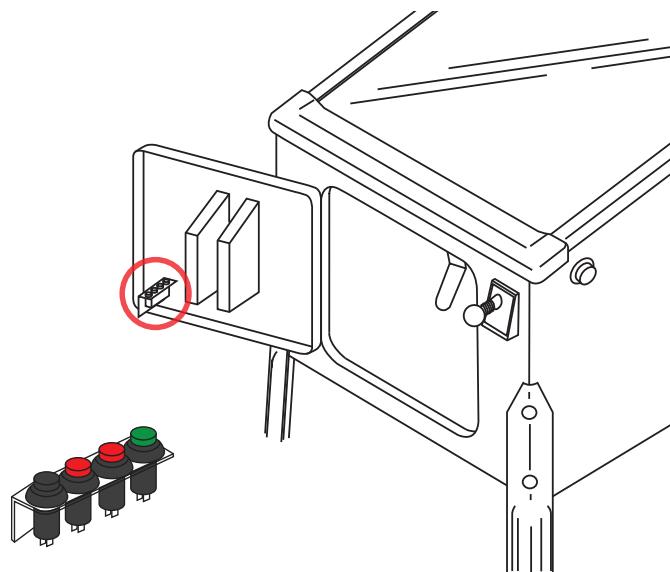


Figure B1. Menu system navigation buttons.

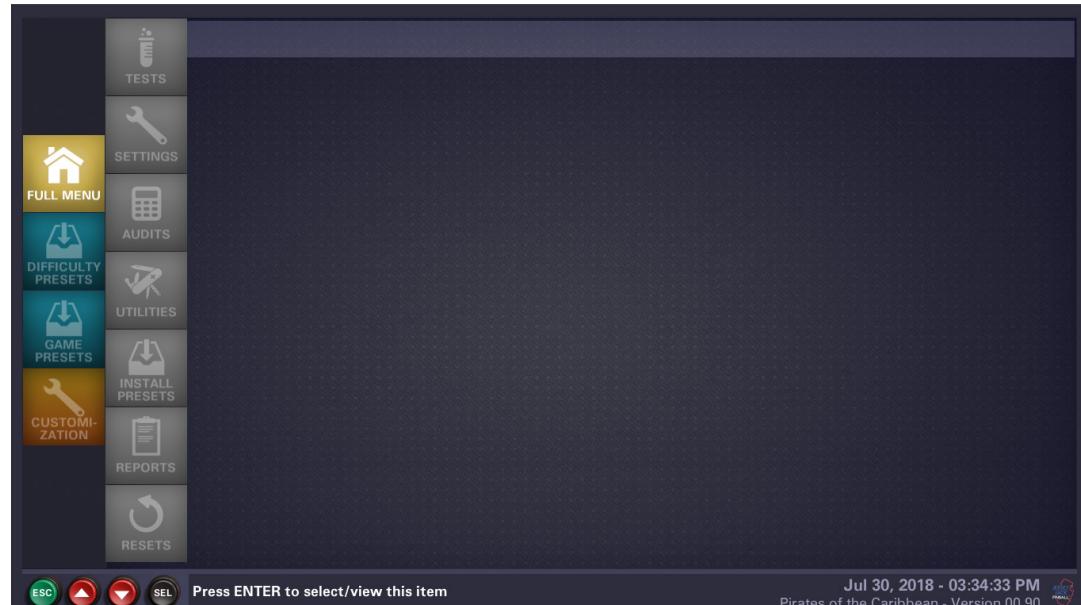


Figure B2. POTC menu system's main menu screen.

B.1 Menu System Basics

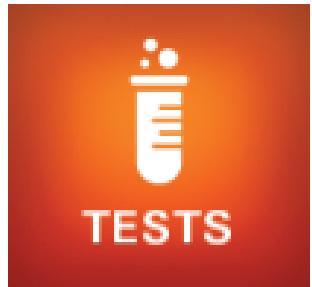
The POTC menu system allows the user or operator of the game to test the performance of its components and assemblies, personalize its rules and track, monitor or manage its play and/or earnings. Four pushbuttons are used to navigate the menu system, make adjustments, enter data, check components, trigger tests, etc. The buttons are located on the inside of the coin door, mounted to a bracket nearest its outside edge (circled in figure B1).

The buttons are labeled: black is **Enter**, red next to it is **Up/+**, next red is **Down/-** and green is **Back/Escape**. Each time you press a button, you will hear an audio response through the game's speakers. Use **Enter** to enter a sub-menu, select a menu item to change or execute a command. Use **Up/+** or **Down/-** to maneuver through menu choices or increase/decrease data values for a selected menu item. Use **Back/Escape** to exit a sub-menu or escape from a selected menu item without saving changes. Each sub-menu screen contains specific instructions for button use and/or visual cues superimposed over the button illustrations in the lower left corner of the LCD screen.

To enter the menu system at any time (after system boot-up), open the coin door and momentarily press **Enter**. The main menu screen will instantly appear on the game's LCD monitor (figure B2). The current date and time will be displayed in the lower right hand corner of the screen, along with the version of software the game is running. All of the RGB LEDs and GI/flasher LEDs in the game will light up in white to improve visibility above and below the playfield.

From the main menu screen, you can access the game's **Test Report** (if present), device/component tests, game settings, audits, utilities, presets, reports and resets. Simply move up/down in the list of menu icons, using **Up/+** and **Down/-**, then press **Enter** to select the sub-menu you'd like to access. To exit the menu system and return to game play, press **Back/Escape**. Specific details for each main menu item are included later in this section. From this screen, you can also easily jump into the **Game Presets**, **Difficulty Presets & Customization** menus to quickly customize your game.

Note: When the coin door is opened, the game's safety interlock switch (the upper switch on item 4, page C-2 of this manual) disables the 70-volt power running to the playfield. In order to activate 70-volt devices in any of the diagnostics tests, you must either close the coin door or pull the safety interlock switch's actuator out (it will "click" and lock in place). When you close the coin door, the interlock switch actuator will be pushed back into its normal (unlocked) position. **CAUTION:** Most of the high power coils will be enabled, so slingshots, pop bumpers, VUKs and flippers (if activated by the flipper buttons) will kick a ball around as it rolls down the playfield - or fire when trigger switches are closed by any means. **So please be careful with your fingers and tools on the playfield surface! If you lift the playfield for any reason, please be careful around high power coil lugs, as they present a shock hazard!**



TESTS

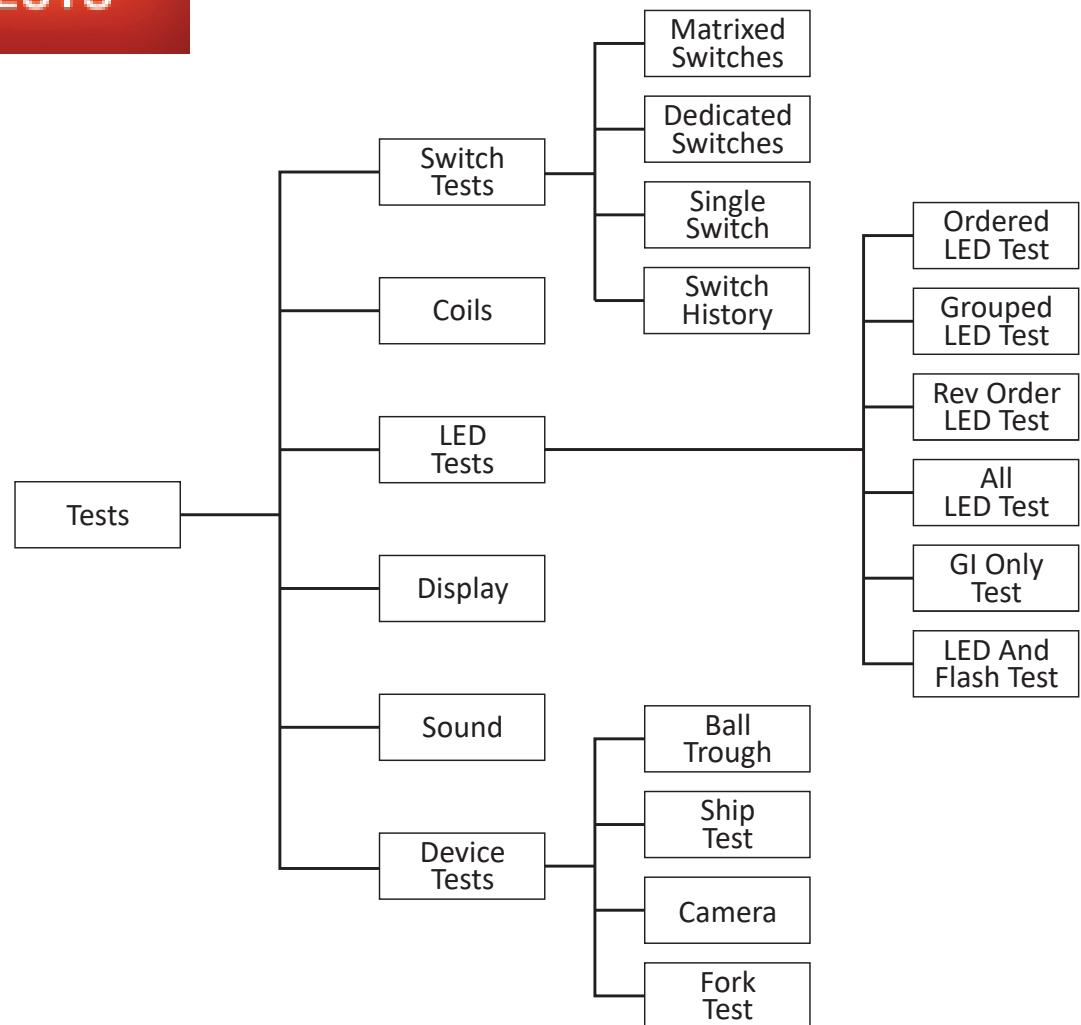


Figure B3. Tests menu tree.

B.2 Tests

The **Tests** menu (see figure B3 for an outline) allows the user to test all major components and assemblies in the game for proper operation.

Switch Tests - test all matrixed or dedicated switches in the game. A screen will be displayed for the selected group (**Matrixed Switches** or **Dedicated Switches**) showing the status of every switch within the group. As you manually open or close switches, the status for each is updated on the screen and you hear an audio response through the game's speakers. In **Single Switch** test, you can scroll through the entire list of switches and repeatedly open or close any single switch. The **Switch History** screen displays the 24 most recent inactive-to-active switch transitions.

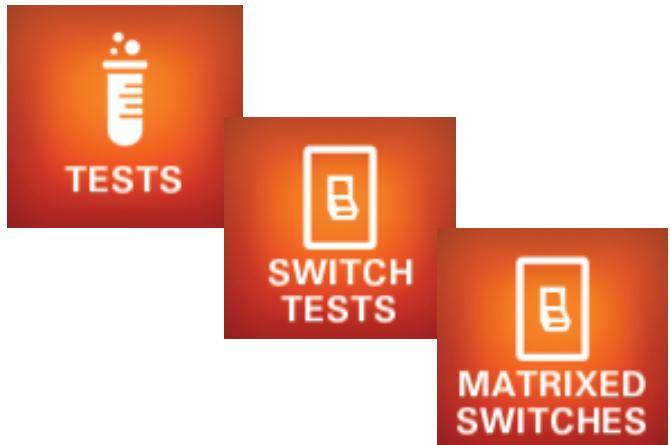
Coils - test virtually any coil, magnet, motor or light in the game. A screen will be displayed, listing all of the coils, magnets, motors and lights in the game that can be energized. You can auto-cycle through the list one at a time, or repeatedly/manually trigger a single device.

LED Tests - test the RGB LEDs in the game (feature and GI lighting). **Ordered LED Test** - you can step through the list of RGB LEDs, one at a time, in hardware order, and test the color-producing capability of each. **Grouped LED Test** - you can step through the list of RGB LEDs, one at a time, in grouped order, and test the color-producing capability of each. **Rev Order LED Test** - basically the same as the **Ordered LED Test**, except the LEDs are listed in reverse hardware order. **All LED Test** - all LEDs (RGB and GI) will light at once, allowing you to test the color-producing capability of the entire chain at one time. **GI Only Test** - allows you to test the color-producing capability of LEDs used for GI purposes. **LED And Flash Test** - allows you to test the functionality of all CPU-controlled lighting in the game at one time.

Display - test the basic colors and alignment of images on the game's LCD monitor. You can step through several fundamental colors on the screen and superimpose a grid on it to check for proper centering and alignment of displayed images.

Sound - test the game's sound system for proper balance and operation with sound effects, voices, music and a wide variety of tones and sweeps.

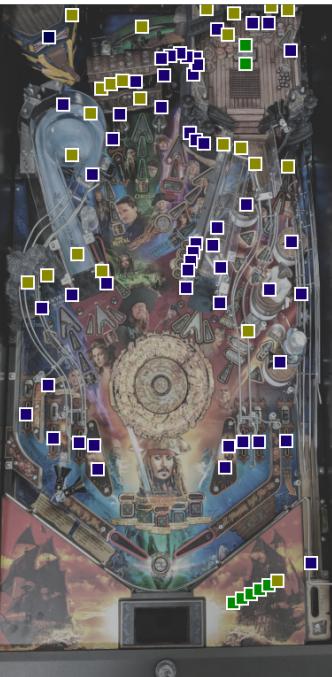
Device Tests - test all of the major game devices/assemblies (**Ball Trough**, **Black Pearl Rocking Ship Playfield**, **Camera & 3-Ball Lock Chest Forks**) for proper operation. A specific screen will be displayed for each device, allowing the user to repeatedly exercise it and ensure that it is functioning correctly.



| MATRIXED SWITCHES | | | | | | | | | | | | |
|--------------------|--------------------------------------|---|--------------------------------------|---------------------------------|---------------------------|-----------------------------------|-----------------------------------|---|--|---|--|------------------------------------|
| | Active switch | | | | Inactive switch (n/o) | | | | Inactive opto (n/o) | | | |
| | Active opto | | Inactive switch (n/c) | | Inactive opto (n/c) | | Inactive opto (n/o) | | Active opto | | Inactive switch (n/o) | |
| | Drive 1 J201-1 | Drive 2 J201-2 | Drive 3 J201-3 | Drive 4 J201-4 | Drive 5 J201-5 | Drive 6 J201-6 | Drive 7 J201-7 | Drive 8 J201-8 | Drive 9 J202-1 | Drive 10 J202-2 | Drive 11 J202-3 | |
| Return 1 J200-1 | 5-Ball Trough #5 (left) 01 | Black Pearl (BONUS) X Target 09 | Pop Bumper Area Rubber 17 | 2X Target 25 | Upper Pop Bumper 33 | Left Slingshot, Low 41 | Right Slingshot, Low 49 | Chapter Select Right Rubber 57 | Black Pearl Access VUK 65 | 3-Ball Chest Lock #1 (left) 73 | MAP Subway Enter 81 | |
| WHT BRN | | | | | | | | | | | | |
| Return 2 J200-2 | 5-Ball Trough #4 02 | Black Pearl (BONUS) X Target 10 | Lowers Middle Pop Bumper 18 | 4X Target 26 | Bumper Rollover 34 | Left Slingshot, High 42 | Right Slingshot, High 50 | Chapter Select Target #5 (right) 58 | Black Pearl Cannon Loaded 66 | 3-Ball Chest Lock #2 74 | Bayou Subway Enter 82 | |
| WHT BRN | | | | | | | | | | | | |
| Return 3 J200-3 | 5-Ball Trough #3 03 | not used | Upper Middle Pop Bumper 11 | 6X Target 19 | (G)OLD Target 27 | (G)OLD Target 35 | PIRATE Return Lane 43 | PIRATE Return Lane 51 | Chapter Select Target #4 59 | Black Pearl Left Spinner 67 | 3-Ball Chest Lock #3 (right) 75 | Maelstrom Subway Enter 83 |
| WHT RED | | | | | | | | | | | | |
| Return 4 J200-4 | 5-Ball Trough #2 04 | Black Pearl LOAD Target 12 | 5X Target 20 | PIRATE Target 28 | GOLD Target 36 | PIRATE Return Lane 44 | PIRATE Return Lane 52 | Chapter Select Target #3 60 | Black Pearl Right Spinner 68 | Treasure Chest Lane 69 | The Depths Scoop 76 | 84 |
| WHT ORN | | | | | | | | | | | | |
| Return 5 J200-5 | 5-Ball Trough #1 (right) 05 | Black Pearl (SPOT) GOLD Target 13 | Upper Slingshot, Low 21 | (LOAD) CHEST Target 29 | GO(L)D Target 37 | P(IR)ATE Return Lane 45 | PIRATE (E) Outlane 53 | Chapter Select Target #2 61 | Black Pearl Motor Outer Opto 62 | Left Orbit Enter 69 | Tortuga VUK 77 | 85 |
| WHT YEL | | | | | | | | | | | | |
| Return 6 J200-6 | 5-Ball Trough jam 06 | Black Pearl SPOT (GOLD) Target 14 | Upper Slingshot, High 22 | Turnaround Made 30 | GOLD Target 38 | Spot Character Target 46 | Lower Pop Bumper 54 | Chapter Select Target #1 (left) 62 | Black Pearl Motor Inner Opto 70 | Right Orbit Made 62 | Devil's Triangle Spinner 78 | 86 |
| WHT GRN | | | | | | | | | | | | |
| Return 7 J200-7 | not used (ignored if present) | Black Pearl CANNON Target 07 | (M)AP Target 15 | not used 23 | 3X Target 31 | 3-Ball Lock Forks Up 39 | Shooter Lane 47 | Chapter Select Left Rubber 63 | Right Orbit Enter 66 | Target Ship Bulseye 71 | Maelstrom Ramp Enter 79 | 87 |
| WHT BLU | | | | | | | | | | | | |
| Return 8 J200-8 | not used | not used | M(A)P Target 16 | Maelstrom Ramp Made 24 | M(A)P Target 32 | M(A)P Target 40 | Target Ship Hit 48 | not used OPEN (CHEST) Target 56 | Inner Loop Enter 64 | Left Orbit Hi 72 | Black Pearl Acc. Ramp Made 80 | 88 |
| WHT VIO | | | | | | | | | | | | |
| 08 | | | | | | | | | | | | |

Press START to toggle playfield display.

Figure B4. Matrixed Switch Test screen.



Matrixed Switch Test

When you enter the **Matrixed Switch Test**, the LCD monitor will display the screen shown in figure B4. A window highlighting locations/states of switches on the game's playfield (at right in figure B4) can be toggled on and off by pressing the **Start** button on the front of the cabinet. The playfield window can be moved to the center or right side of the screen by using the **Up/+** or **Down/-** buttons. Each square in the playfield window corresponds to a matrixed switch. The color of the square (in both the playfield window and the matrix itself) represents the current state of that switch.

Active switches, regardless of their type, are displayed in bright green squares. Inactive opto switches are displayed in light tan (if normally unblocked) or dark tan (if normally blocked) squares; all other inactive switches are displayed in bright blue (if normally open) or navy blue (if normally closed) squares. Bad switches (switches that have been inactive for approximately 60 balls played) are displayed in red squares. Unused positions in the matrix are represented by gray squares; any unused position that is registering active (an error) is represented by a brown square.

The driver (column) and return (row) numbers for each switch, along with corresponding wire colors and I/O Board connector/pin numbers, are shown at the top and left side of the screen, respectively.

You can simultaneously test as many switches as you like, or repeatedly test a single switch, observing the results in the matrix and/or the playfield window. The game also provides an audible response each time the state of a switch changes. Note: When adjusting a switch, the best method for testing it is to roll a pinball over it, through it or into it.

To exit the **Matrixed Switch Test** at any time, press the **Back/Escape** button.



DEDICATED SWITCHES

| Ground J601-1 | BLK BLK | Ground J602-1 | BLK BLK | Ground J603-1 | BLK BLK | Ground J604-1 | BLK BLK |
|--|---|---------------------|--|---------------------|--|---------------------|---|
| Return 1 J601-7 | Left Flipper EOS BLK GRY | Return 1 J602-7 | Left Flipper Switch Lower YEL BLK | Return 1 J603-7 | Left Coin Switch BLU BLK | Return 1 J604-8 | Start Button VIO BLK |
| Return 2 J601-6 | Right Flipper EOS BLK BRN | Return 2 J602-6 | Left Flipper Switch Upper YEL BRN | Return 2 J603-6 | Right Coin Switch BLU BRN | Return 2 J604-6 | Coin Door Open VIO BRN |
| Return 3 J601-5 | Upper Left Flipper EOS BLK RED | Return 3 J602-5 | Right Flipper Switch Lower YEL RED | Return 3 J603-5 | Center Dollar Bill Acceptor BLU RED | Return 3 J604-5 | Plumb Bob Tilt VIO RED |
| Return 4 J601-4 | Upper Playfield Left Flipper EOS BLK ORN | Return 4 J602-4 | Right Flipper Switch Upper YEL ORN | Return 4 J603-4 | 4th Coin Slot Switch BLU ORN | Return 4 J604-4 | not used VIO ORN |
| Return 5 J601-2 | Upper Playfield Right Flipper EOS BLK YEL | Return 5 J602-2 | Enter / Menu Button YEL GRN | Return 5 J603-2 | 5th Coin Slot Switch BLU YEL | Return 5 J604-2 | Action Button VIO YEL |
| Return 6 J601-3 | not used BLK GRN | Return 6 J602-3 | Up / Volume + Button YEL GRN | Return 6 J603-3 | Ticket Mech Notch Switch BLU GRN | Return 6 J604-3 | Headphone Panel Volume Down VIO GRN |
| Return 7 J601-8 | not used BLK BLU | Return 7 J602-8 | Down / Volume- Button YEL BLU | Return 7 J603-9 | not used BLU GRY | Return 7 J604-9 | Headphone Panel Volume Up VIO BLU |
| Return 8 J601-9 | not used BLK VIO | Return 8 J602-10 | Escape / Service / Credit Button YEL VIO | Return 8 J603-10 | not used BLU VIO | Return 8 J604-10 | Headphone Panel Jack Sense VIO GRY |
| | | | | | D16 | | D32 |
| Last switch edge: #D13, Enter / Menu Button J602-2 (YEL) - J602-1 (BLK) | | | | | | | |

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Figure B5. Dedicated Switch Test screen.

Dedicated Switch Test

When you enter the **Dedicated Switch Test**, the LCD monitor will display the screen shown in figure B5. The four dedicated switch strings are shown, grouped by their common ground wire. Each square in each string corresponds to a specific switch; the color of the square represents the current state of that switch.

Active switches, regardless of their type, are displayed in bright green squares. Inactive opto switches are displayed in light tan (if normally unblocked) or dark tan (if normally blocked) squares; all other inactive switches are displayed in bright blue (if normally open) or navy blue (if normally closed) squares. Bad switches (switches that have been inactive for approximately 60 balls played) are displayed in red squares. Unused positions in the matrix are represented by gray squares; any unused position that is registering active (an error) is represented by a brown square.

Wire colors and I/O Board connector/pin numbers are shown for each string of switches.

You can simultaneously test as many switches as you like, or repeatedly test a single switch, observing the results on the screen. The game also provides an audible response each time the state of a switch changes.

To exit the **Dedicated Switch Test** at any time, press the **Back/Escape** button.



SINGLE SWITCH

| Switch # | Name | Driver Column | Driver Row | Return Column | Return Row |
|----------|-----------------------------------|---------------|------------|---------------|------------|
| D01 | Left Flipper EOS | BLK | BLK | J601-1 | Ground |
| D02 | Right Flipper EOS | BLK | BLK | J601-1 | Ground |
| D03 | Upper Left Flipper EOS | BLK | BLK | J601-1 | Ground |
| D04 | Upper Playfield Left Flipper EOS | BLK | BLK | J601-1 | Ground |
| D05 | Upper Playfield Right Flipper EOS | BLK | BLK | J601-1 | Ground |
| D06 | not used | BLK | BLK | J601-1 | Ground |
| D07 | not used | BLK | BLK | J601-1 | Ground |
| D08 | not used | BLK | BLK | J601-1 | Ground |
| D09 | Left Flipper Switch Lower | BLK | BLK | J602-1 | Ground |
| D10 | Left Flipper Switch Upper | BLK | BLK | J602-1 | Ground |
| D11 | Right Flipper Switch Lower | BLK | BLK | J602-1 | Ground |
| D12 | Right Flipper Switch Upper | BLK | BLK | J602-1 | Ground |
| D13 | Enter / Menu Button | BLK | BLK | J602-1 | Ground |
| D14 | Up / Volume + Button | BLK | BLK | J602-1 | Ground |
| D15 | Down / Volume- Button | BLK | BLK | J602-1 | Ground |
| D16 | Escape / Service Credit Button | BLK | BLK | J602-1 | Ground |
| D17 | Left Coin Switch | BLK | BLK | J603-1 | Ground |
| D18 | Right Coin Switch | BLK | BLK | J603-1 | Ground |
| D19 | Center Dollar Bill Acceptor | BLK | BLK | J603-1 | Ground |
| D20 | 4th Coin Slot Switch | BLK | BLK | J603-1 | Ground |
| D21 | 5th Coin Slot Switch | BLK | BLK | J603-1 | Ground |
| D22 | Ticket Mech Notch Switch | BLK | BLK | J603-1 | Ground |
| D23 | not used | BLK | BLK | J603-1 | Ground |
| D24 | not used | BLK | BLK | J603-1 | Ground |
| | | BLK | GRY | J601-7 | Return 1 |
| | | BLK | BRN | J601-6 | Return 2 |
| | | BLK | RED | J601-5 | Return 3 |
| | | BLK | ORW | J601-4 | Return 4 |
| | | BLK | YEL | J601-2 | Return 5 |
| | | BLK | GRN | J601-3 | Return 6 |
| | | BLK | BLU | J601-8 | Return 7 |
| | | BLK | VIO | J601-9 | Return 8 |
| | | YEL | BLK | J602-7 | Return 1 |
| | | YEL | BRN | J602-6 | Return 2 |
| | | YEL | RED | J602-5 | Return 3 |
| | | YEL | ORW | J602-4 | Return 4 |
| | | YEL | GRY | J602-2 | Return 5 |
| | | YEL | GRN | J602-3 | Return 6 |
| | | YEL | BLU | J602-8 | Return 7 |
| | | YEL | VIO | J602-10 | Return 8 |
| | | BLU | BLK | J603-7 | Return 1 |
| | | BLU | BRN | J603-6 | Return 2 |
| | | BLU | RED | J603-5 | Return 3 |
| | | BLU | ORW | J603-4 | Return 4 |
| | | BLU | YEL | J603-2 | Return 5 |
| | | BLU | GRN | J603-3 | Return 6 |
| | | BLU | GRY | J603-9 | Return 7 |
| | | BLU | VIO | J603-10 | Return 8 |

Press +/- to highlight desired switch.

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Figure B6. Single Switch Test screen.

Single Switch Test

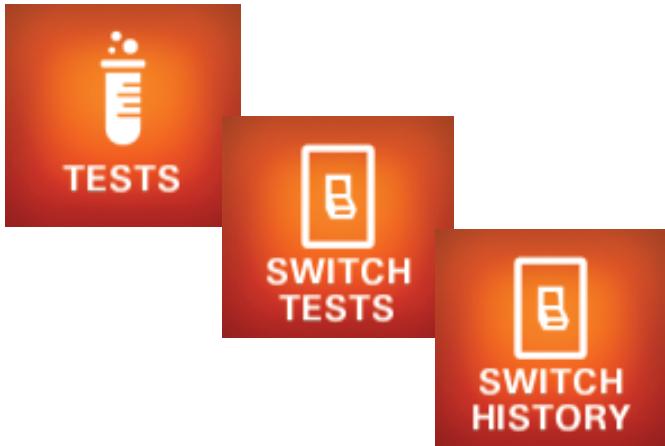
When you enter the **Single Switch Test**, the LCD monitor will display the screen shown in figure B6. The entire list of dedicated and matrixed switches is shown alongside a window highlighting the location/state of the currently selected switch on the game's playfield (at right in figure B6). The switch is displayed as a small, blinking square; the color of the square represents its current state.

An active switch, regardless of its type, is displayed as a bright green square. An inactive opto switch is displayed as a light tan (if normally unblocked) or dark tan (if normally blocked) square; any other inactive switch is displayed as a bright blue (if normally open) or navy blue (if normally closed) square. A bad switch (a switch that has been inactive for approximately 60 balls played) is displayed as a red square. Unused positions in the matrix are not displayed in the playfield window.

All switch driver (column) and return (row) numbers are shown, along with corresponding wire colors and I/O Board connector/pin numbers.

You can scroll through the list of matrixed switches, using the **Up/+** and **Down/-** buttons, and select any switch to test. You can then repeatedly open or close the selected switch, observing the results in the playfield window. The game also provides an audible response each time the state of the switch changes. Note: When adjusting a switch, the best method for testing it is to roll a pinball over it, through it or into it.

To exit the **Single Switch Test** at any time, press the **Back/Escape** button.



SWITCH HISTORY

| | Column | Row | Wire Color | Connector/Pin |
|----------|--------------------------------|-----|------------|-----------------|
| #086: | Devil's Triangle Spinner | GRY | RED | J202-3 Drive 11 |
| #087: | Maelstrom Ramp Enter | GRY | RED | J202-3 Drive 11 |
| #088: | Black Pearl Acc. Ramp Made | GRY | RED | J202-3 Drive 11 |
| 3x #D13: | Enter / Menu Button | BLK | BLK | J602-1 Ground |
| 3x #D14: | Up / Volume+ Button | BLK | BLK | J602-1 Ground |
| 3x #D15: | Down / Volume- Button | BLK | BLK | J602-1 Ground |
| 5x #D14: | Up / Volume+ Button | BLK | BLK | J602-1 Ground |
| #D13: | Enter / Menu Button | BLK | BLK | J602-1 Ground |
| #D15: | Down / Volume- Button | BLK | BLK | J602-1 Ground |
| #D14: | Up / Volume+ Button | BLK | BLK | J602-1 Ground |
| #D16: | Escape / Service Credit Button | BLK | BLK | J602-1 Ground |
| 2x #D14: | Up / Volume+ Button | BLK | BLK | J602-1 Ground |
| #D15: | Down / Volume- Button | BLK | BLK | J602-1 Ground |
| 3x #D13: | Enter / Menu Button | BLK | BLK | J602-1 Ground |
| 3x #D25: | Start Button | BLK | BLK | J604-1 Ground |
| #D16: | Escape / Service Credit Button | BLK | BLK | J602-1 Ground |
| #D14: | Up / Volume+ Button | BLK | BLK | J602-1 Ground |
| #D13: | Enter / Menu Button | BLK | BLK | J602-1 Ground |
| #D16: | Escape / Service Credit Button | BLK | BLK | J602-1 Ground |
| #D14: | Up / Volume+ Button | BLK | BLK | J602-1 Ground |
| #D13: | Enter / Menu Button | BLK | BLK | J602-1 Ground |
| #D16: | Escape / Service Credit Button | BLK | BLK | J602-1 Ground |
| #D14: | Up / Volume+ Button | BLK | BLK | J602-1 Ground |
| #D13: | Enter / Menu Button | BLK | BLK | J602-1 Ground |
| #D16: | Escape / Service Credit Button | BLK | BLK | J602-1 Ground |
| #D14: | Up / Volume+ Button | BLK | BLK | J602-1 Ground |
| #D13: | Enter / Menu Button | BLK | BLK | J602-1 Ground |

Press ENTER to clear history.

Figure B7. Switch History Test screen.

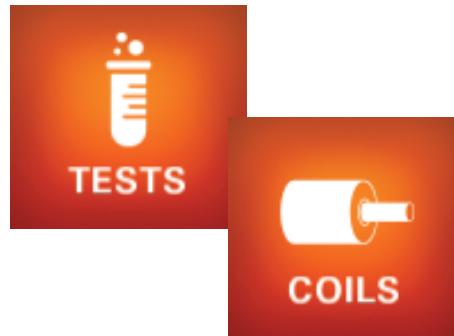
Switch History Test

When you enter the **Switch History Test**, the LCD monitor will display the screen shown in figure B7. A list of the 24 most recent dedicated and/or matrixed switch inactive-to-active transitions is shown alongside a window depicting the game's playfield (at right in figure B7).

All switch driver (column) and return (row) numbers are shown, along with corresponding wire colors and I/O Board connector/pin numbers.

You can clear the **Switch History Test** listing by pressing the **Enter** button.

To exit the **Switch History Test** screen at any time, press the **Back/Escape** button.



COILS

| | MANUAL | REPEAT | RUNNING |
|---|--------|--------|---|
| Coil #001: Lower Pop Bumper | | | BRN BLK J104-9 Q308 70V J104-1 F701 F704 |
| Coil #002: Lower Middle Pop Bumper | | | BRN GRY J104-8 Q307 70V J104-1 F701 F704 |
| Coil #003: Upper Middle Pop Bumper | | | BRN RED J104-7 Q306 70V J104-1 F701 F704 |
| Coil #004: Upper Pop Bumper | | | BRN ORNG J104-6 Q305 70V J104-1 F701 F704 |
| Coil #005: Tortuga VUK | | | BRN YEL J104-5 Q304 70V J104-1 F701 F704 |
| Coil #006: Upper Slingshot | | | BRN GRN J104-4 Q303 70V J104-1 F701 F704 |
| Coil #007: Knocker | | | BRN BLU J104-3 Q302 70V J104-1 F701 F704 |
| Coil #008: not used | | | BRN VIO J104-2 Q301 70V J104-1 F701 F704 |
| Coil #009: Left Flipper Power | | | RED BLK J105-10 Q318 70V J105-1 F701 F705 |
| Coil #010: Left Flipper Hold | | | RED BRN J105-8 Q317 70V J105-1 F701 F705 |
| Coil #011: Right Flipper Power | | | RED GRY J105-7 Q316 70V J105-1 F701 F705 |
| Coil #012: Right Flipper Hold | | | RED ORNG J105-6 Q315 70V J105-1 F701 F705 |
| Coil #013: 5-Ball Trough VUK | | | RED YEL J105-5 Q314 70V J105-1 F701 F705 |
| Coil #014: Auto-launch | | | RED GRN J105-4 Q313 70V J105-1 F701 F705 |
| Coil #015: Right Slingshot | | | RED BLU J105-3 Q312 70V J105-1 F701 F705 |
| Coil #016: not used | | | RED VIO J105-2 Q311 70V J105-1 F701 F705 |
| Coil #017: 3-Ball Lock Forks Raise | | | GRN BLK J106-10 Q328 70V J106-1 F701 F706 |
| Coil #018: 3-Ball Lock Forks Retract | | | GRN BRN J106-9 Q327 70V J106-1 F701 F706 |
| Coil #019: Chapter Select Buried Magnet | | | GRN RED J106-7 Q326 70V J106-1 F701 F706 |
| Coil #020: Orbit Magnet | | | GRN GRY J106-6 Q325 70V J106-1 F701 F706 |
| Coil #021: Black Pearl Access VUK | | | GRN YEL J106-5 Q324 70V J106-1 F701 F706 |
| Coil #022: not used | | | GRN GRN J106-4 Q323 70V J106-1 F701 F706 |
| Coil #023: not used | | | GRN BLU J106-3 Q322 70V J106-1 F701 F706 |
| Coil #024: not used | | | GRN VIO J106-2 Q321 70V J106-1 F701 F706 |

Press ENTER to change mode; Press START to test coil

Figure B8. Coils Test screen.

Coils Test

When you enter the **Coils Test**, the LCD monitor will display the screen shown in figure B8. The entire list of coils, magnets, motors and lights is shown alongside a window highlighting the location of the currently selected device on the game's playfield (at right in figure B8). The device is displayed as a small, white, blinking square. Note: Devices in the list that cannot be activated in the **Coils Test** are highlighted in blue text (these devices have their own specific tests).

Coil number, power/trigger wire colors, I/O Board connectors/pins, drive transistor, in-line fuses and supply voltage level are provided for each device in the list.

There are three different modes for triggering a device: **RUNNING**, **REPEAT** and **MANUAL**. The current mode is highlighted in green text at the top of the screen; you change the current mode by pressing the **Enter** button. In **RUNNING** mode, the game automatically cycles through the list, triggering each device once. In **REPEAT** mode, you scroll through the list (using the **Up/+** and **Down/-** buttons) and select a specific device; the game then repeatedly triggers it. In **MANUAL** mode, you select a specific device in the list and trigger it yourself using the **Start** button on the front of the cabinet.

Note: When the coin door is opened, the game's safety interlock switch (the upper switch on item 4, page C-2 of this manual) disables the 70-volt power running to the playfield. In order to activate 70-volt devices in the **Coils Test**, you must either close the coin door or pull the safety interlock switch's actuator out (it will "click" and lock in place). When you close the coin door, the interlock switch actuator will be pushed back into its normal (unlocked) position.

To exit the **Coils Test** at any time, press the **Back/Escape** button.

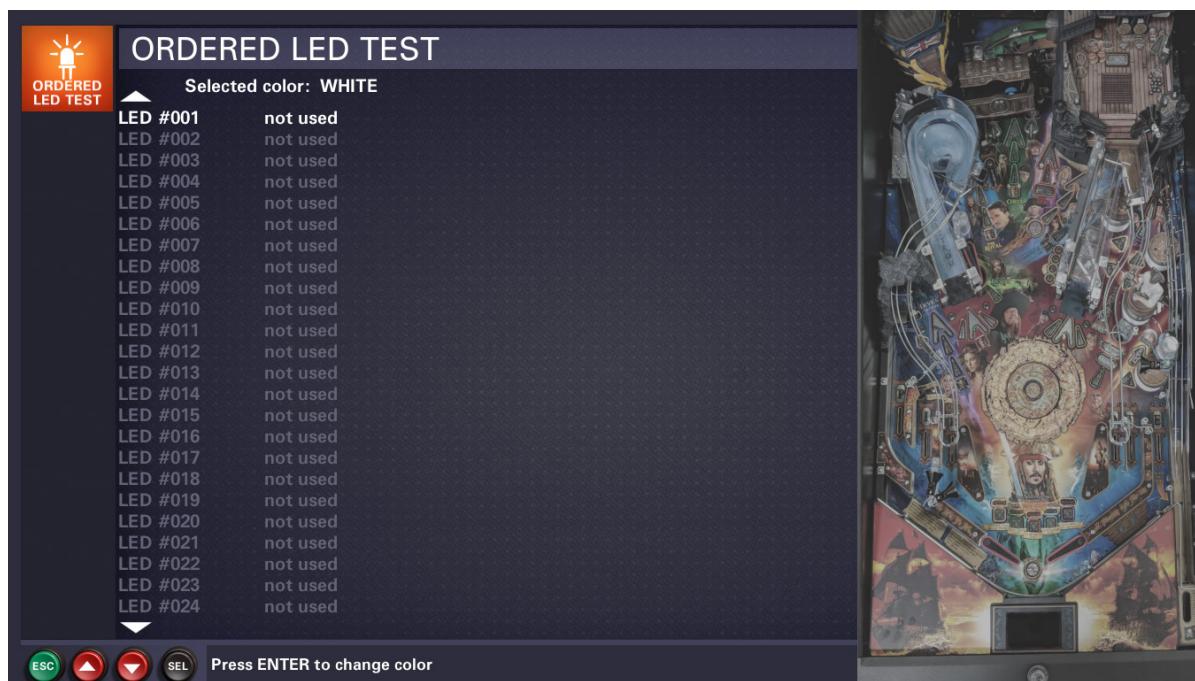
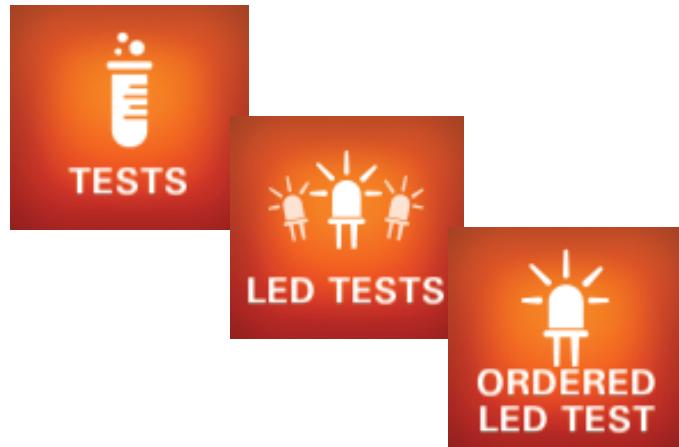


Figure B9. Ordered LED Test screen.

Ordered LED Test

When you enter the **Ordered LED Test**, the LCD monitor will display the screen shown in figure B9. The entire list of RGB LEDs is shown alongside a window highlighting the location of the currently selected LED on the game's playfield (at right in figure B9). The LED is represented in the window by a small, white, blinking circle, while the actual LED flashes on the playfield.

Initially, the selected LED flashes the color white. You can change the color to red, green, blue and back to white by repeatedly pressing the **Enter** button. The current color will be displayed at the top of the screen. You can scroll through the list of LEDs using the **Up/+** and **Down/-** buttons.

For this test, the RGB LEDs are listed in hardware order (the order that the RGB LED boards are physically connected to controller boards, under the playfield). In this regard, the POTC RGB LED string can be considered one long chain. The **Ordered LED Test** allows you to step through and test this entire chain, one LED at a time.

To exit the **Ordered LED Test** at any time, press the **Back/Escape** button.

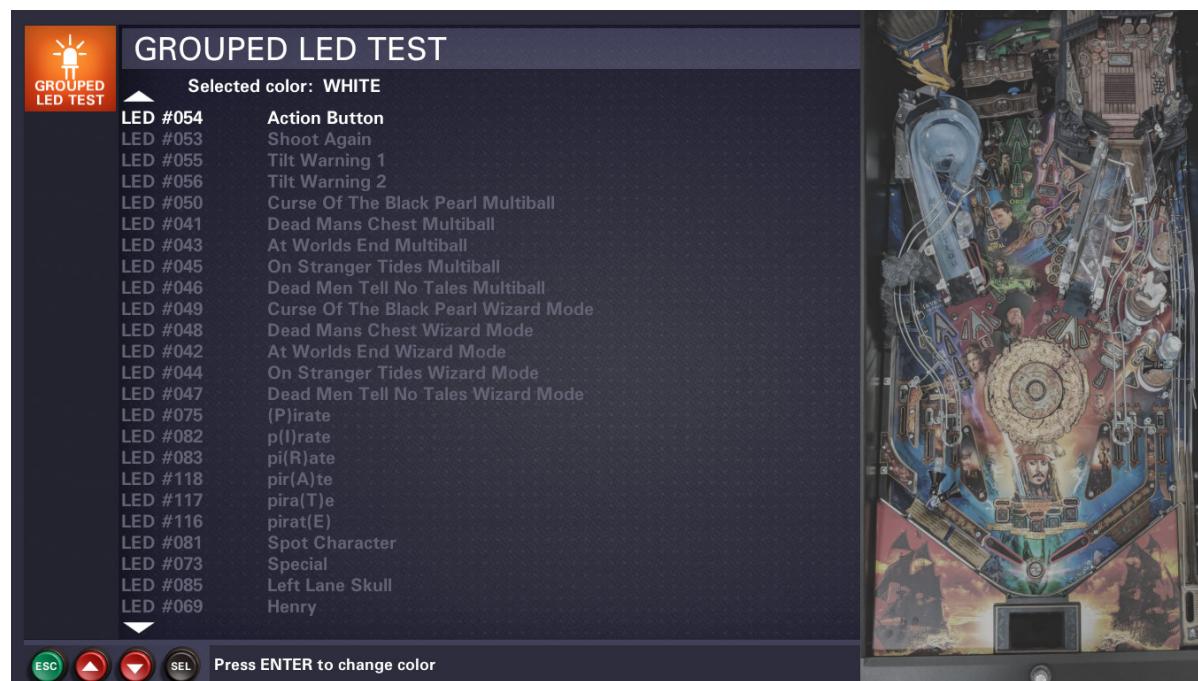


Figure B10. Grouped LED Test screen.

Grouped LED Test

When you enter the **Grouped LED Test**, the LCD monitor will display the screen shown in figure B10. The entire list of RGB LEDs is shown alongside a window highlighting the location of the currently selected light on the game's playfield (at right in figure B10). The light is displayed in the window as a small, white, blinking circle while the actual LED flashes on the playfield.

Initially, the selected LED flashes the color white. You can change the color to red, green, blue and back to white by repeatedly pressing the **Enter** button. The current color will be displayed at the top of the screen. You can scroll through the list of LEDs using the **Up/+** and **Down/-** buttons.

For this test, the RGB LEDs are listed in logical/grouped order. The POTC RGB LED string is one long chain. The **Grouped LED Test** allows you to step through and test the entire string of RGB LEDs, in groups (such as all **G-O-L-D** target inserts), in logical order (words spelled in order), as they are associated on the playfield. The test begins with the LEDs in the lowest portion of the main playfield and progresses upward.

To exit the **Grouped LED Test** at any time, press the **Back/Escape** button.

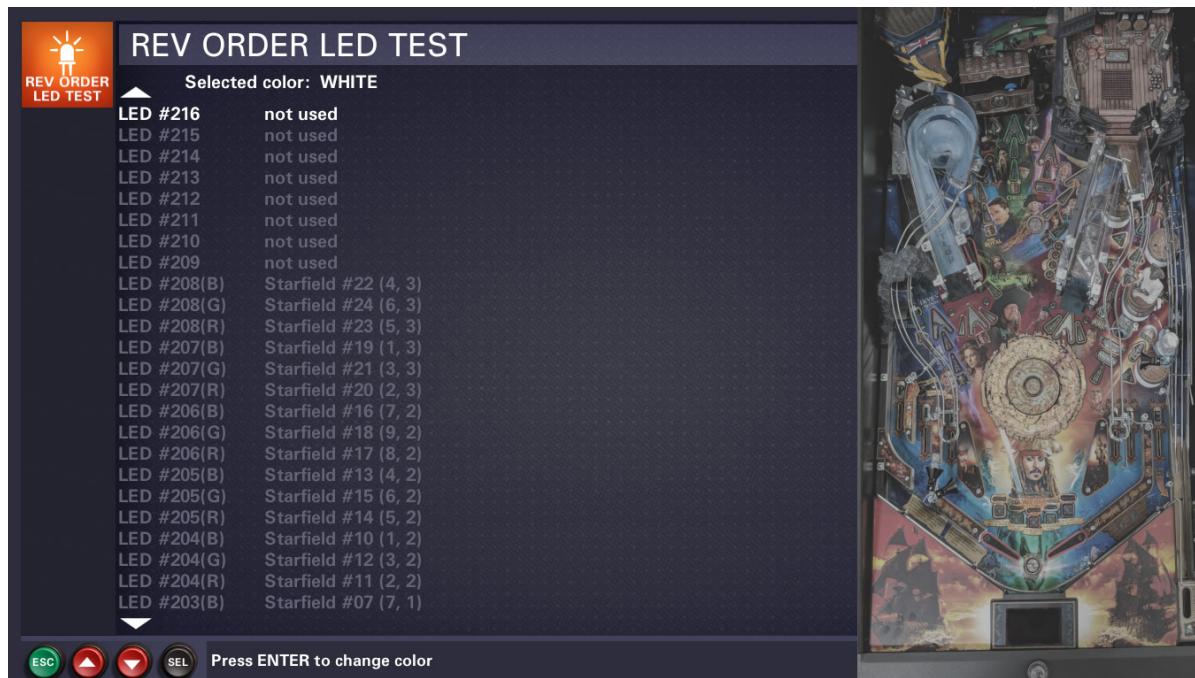
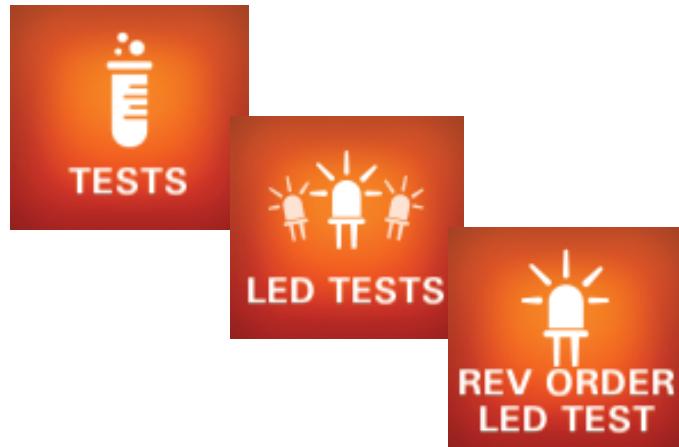


Figure B11. Reverse Order LED Test screen.

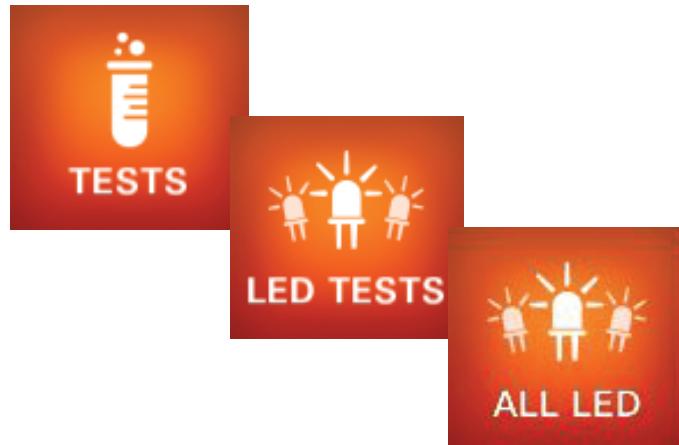
Reverse Order LED Test

When you enter the **Reverse Order LED Test**, the LCD monitor will display the screen shown in figure B11. The entire list of RGB LEDs is shown alongside a window highlighting the location of the currently selected LED on the game's playfield (at right in figure B11). The LED is represented in the window by a small, white, blinking circle, while the actual LED flashes on the playfield.

Initially, the selected LED flashes the color white. You can change the color to red, green, blue and back to white by repeatedly pressing the **Enter** button. The current color will be displayed at the top of the screen. You can scroll through the list of LEDs using the **Up/+** and **Down/-** buttons.

For this test, the RGB LEDs are listed in reverse hardware order (the reverse order that the RGB LED boards are physically connected to controller boards, under the playfield). The **Reverse Order LED Test** allows you to step through and test this entire chain, in reverse order, one LED at a time.

To exit the **Reverse Order LED Test** at any time, press the **Back/Escape** button.



All LED Test

When you enter the **All LED Test**, the LCD monitor will display the screen shown in figure B12. The entire chain of RGB LEDs is lit at once. Initially, the LEDs are white and not flashing. You can change the color to red, green, blue and back to white by repeatedly pressing the **Enter** button. The current color will be displayed at the top of the screen. Press either the **Up/+** or **Down/-** button to toggle the LED string between flashing and constant-on.

To exit the **All LED Test** at any time, press the **Back/Escape** button.



Figure B12. All LED Test screen.

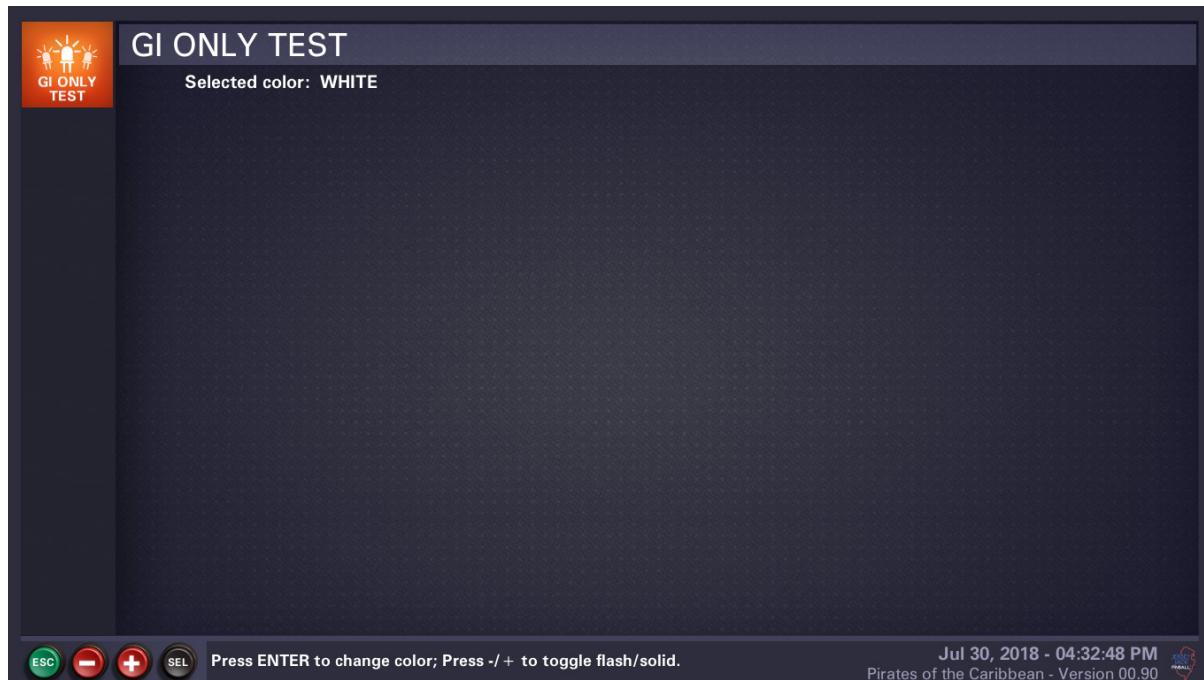
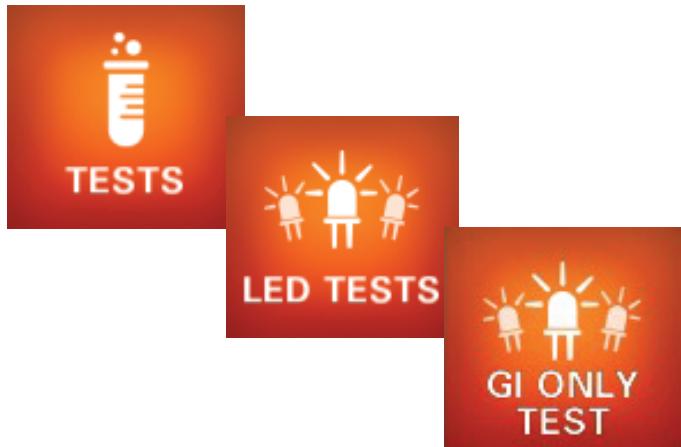


Figure B13. GI Only Test screen.

GI Only Test

When you enter the **GI Only Test**, the LCD monitor will display the screen shown in figure B13. All LEDs used for general illumination are lit at once. Initially, the LEDs are white and not flashing. In LE & CE POTC games, you can change the GI color to red, green, blue and back to white by repeatedly pressing the **Enter** button. The current color will be displayed at the top of the screen. Std versions of POTC games use cool white GI LEDs (no RGB), so they remain white, regardless of what color is selected on the LCD screen. Press either the **Up/+** or **Down/-** button to toggle the GI LEDs between flashing and constant-on.

To exit the **GI Only Test** at any time, press the **Back/Escape** button.



Figure B14. LED And Flash Test screen.

LED And Flash Test

When you enter the **LED And Flash Test**, the LCD monitor will display the screen shown in figure B14. All RGB LEDs and GI LEDs are lit at once. All CPU-controlled lights (spotlights, Start button light, etc.) are flashing. Initially, the RGB and GI LEDs are white and not flashing. You can change the color of the RGB LEDs to red, green, blue and back to white by repeatedly pressing the **Enter** button. The current color will be displayed at the top of the screen. Press either the **Up/+** or **Down/-** button to toggle the RGB and GI LEDs between flashing and constant-on.

To exit the **LED And Flash Test** at any time, press the **Back/Escape** button.

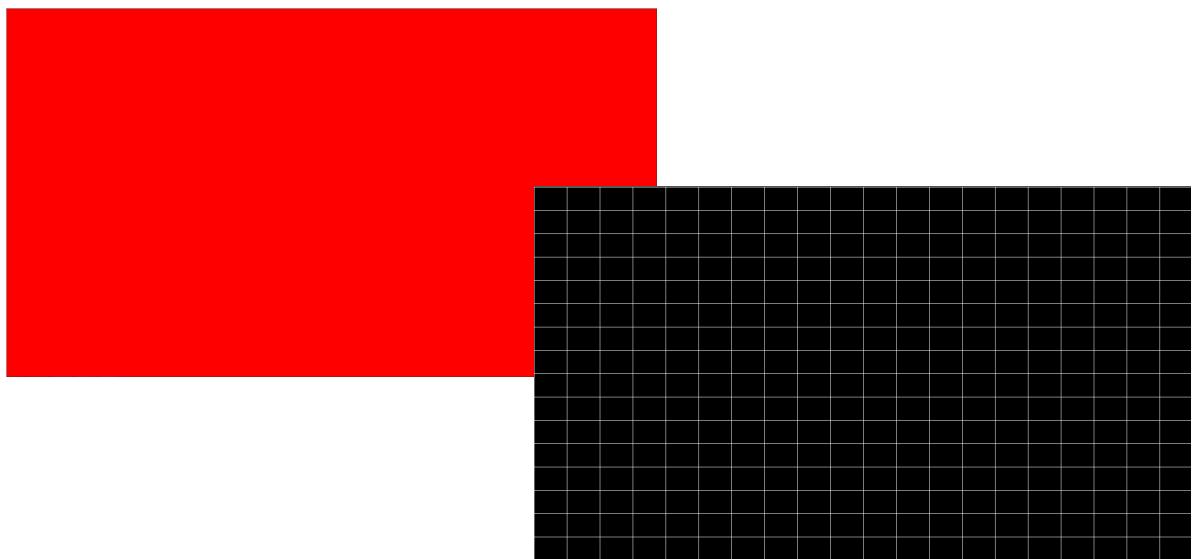


Figure B15. Display Test screens.

Display Test

When you enter the **Display Test**, the LCD monitor will display an edge-to-edge red screen, as shown at left in figure B15. You can change the full-screen color to green, blue then white by pressing the **Up/+**, **Down/-** or **Enter** button three times. Pressing one of these buttons again will fill the screen with a white grid against a black background; once more will change the grid to black against a white background.

The color screens allow you to test the LCD monitor's color saturation performance, from edge to edge. The grids allow you to test image alignment on the monitor.

To exit the **Display Test** at any time, press the **Back/Escape** button.

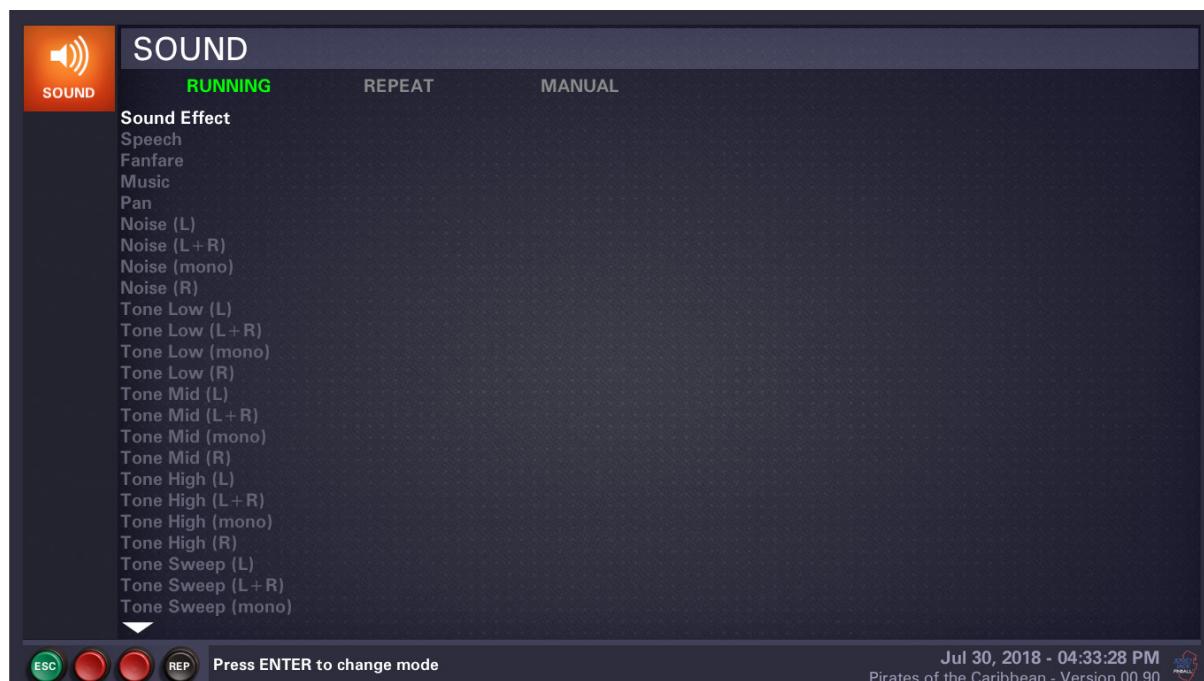
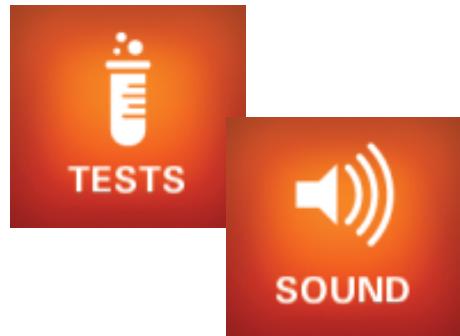


Figure B16. Sound Test screen.

Sound Test

When you enter the **Sound Test**, the LCD monitor will display the screen shown in figure B16. The list of programmed test sounds is displayed.

There are three different modes for testing sounds: **RUNNING**, **REPEAT** and **MANUAL**. The current mode is highlighted in green text at the top of the screen; you change the current mode by pressing the **Enter** button. In **RUNNING** mode, the game automatically cycles through the list, playing each sound once. In **REPEAT** mode, you scroll through the list (using the **Up/+** and **Down/-** buttons) and select a specific sound; the game then repeatedly plays it. In **MANUAL** mode, you select a specific sound in the list and trigger it yourself using the **Start** button on the front of the cabinet.

To exit the **Sound Test** at any time, press the **Back/Escape** button.

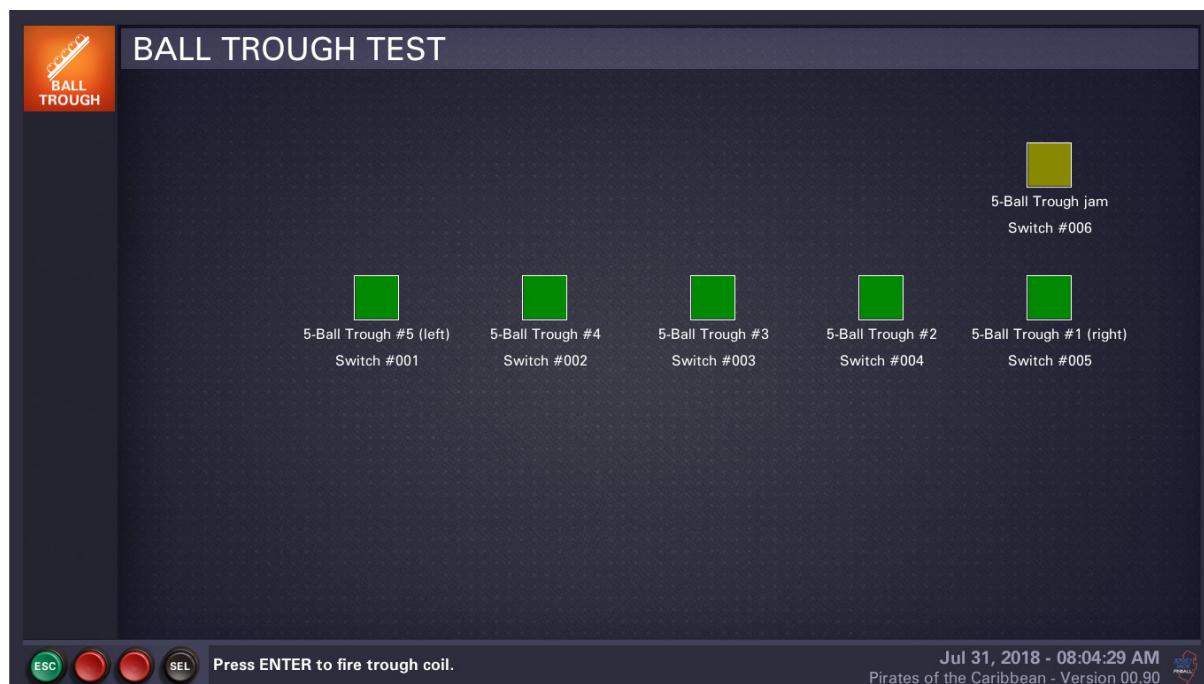


Figure B17. Ball Trough Test screen.

Ball Trough Test

When you enter the **Ball Trough Test**, the LCD monitor will display the screen shown in figure B17. The squares on the screen represent the current states of the six opto switch transmitter/receiver pairs in the ball trough mechanism, under the lower part of the playfield. There are five opto switches in the bottom of the trough (labeled "#1" to "#5") and one higher, in the neck of the trough VUK (labeled "jam"). A green square represents a blocked opto switch, typically caused by a ball in that position in the trough. A tan square represents an unblocked opto switch (no ball in that position). For reference, corresponding matrixed switch numbers are shown under each square.

You can use the **Enter** button to fire the trough VUK. The rightmost ball in the trough will be kicked into the shooter lane, then auto-launched up the playfield. Most of the high power coils will be enabled, so slingshots, pop bumpers, VUKs and flippers (if activated by the flipper buttons) will kick a ball around as it rolls down the playfield - so **be careful with your fingers!** You can empty the trough, one ball at a time (catching each one before it returns to the trough), and test all of the opto switches in the process.

Note: When the coin door is opened, the game's safety interlock switch (the upper switch on item 4, page C-2 of this manual) disables the 70-volt power running to the playfield. To allow coils to function in the **Ball Trough Test**, you must either close the coin door or pull the safety interlock switch's actuator out (it will "click" and lock in place). When you close the coin door, the interlock switch actuator will be pushed back into its normal (unlocked) position.

To exit the **Ball Trough Test** at any time, press the **Back/Escape** button.



Ship (Black Pearl Mini PF) Test

When you enter the **Ship (Black Pearl Mini PF) Test**, the LCD monitor will display the screen shown in figure B18. The two squares on the screen represent the states of the two U-shaped opto switches on the Black Pearl PF rocker assembly, behind the back panel, in the upper right corner of the playfield. A green square indicates an activated opto switch; a transparent square indicates an inactive opto switch. For reference, corresponding motor, relay and matrixed switch numbers are shown under the squares. Green text indicates the motor, relay or switch is active; white text indicates that the motor, relay or switch is inactive.



Figure B18. Ship (Black Pearl Mini PF) Test screen.

There are several options for activating and testing the playfield rock motor in the lower left corner of the screen. Running the motor will change the state of the two opto switches, allowing you to test their functionality as well. Use the **Up/+** and **Down/-** buttons to select a command, then hit the **Enter** button to execute the highlighted command. **Full Run** continuously rocks the Black Pearl PF back and forth, left and right. **Move Left** rocks the Black Pearl PF to its leftmost position and stops. **Move Right** rocks the Black Pearl PF to its rightmost position and stops. **Move Home** returns the Black Pearl PF to its level position and stops. **All Off** shuts off rocking motor immediately, leaving the Black Pearl PF in whatever position it happens to be in when the command is executed. **Force Recalibration** continuously rocks the Black Pearl PF back and forth (quickly at first, then progressively slower, over time) to calibrate the rocking/controlling software for more accurate, repeatable operation during gameplay. NOTE: The Black Pearl Mini PF Rock Motor & Relay will both be active (green text) while the calibration is running. When the calibration is complete, the motor & relay will both be inactive (white text) and the slowest achievable motor speed will be displayed.

To exit the **Ship (Black Pearl Mini PF) Test** at any time, press the **Back/Escape** button.

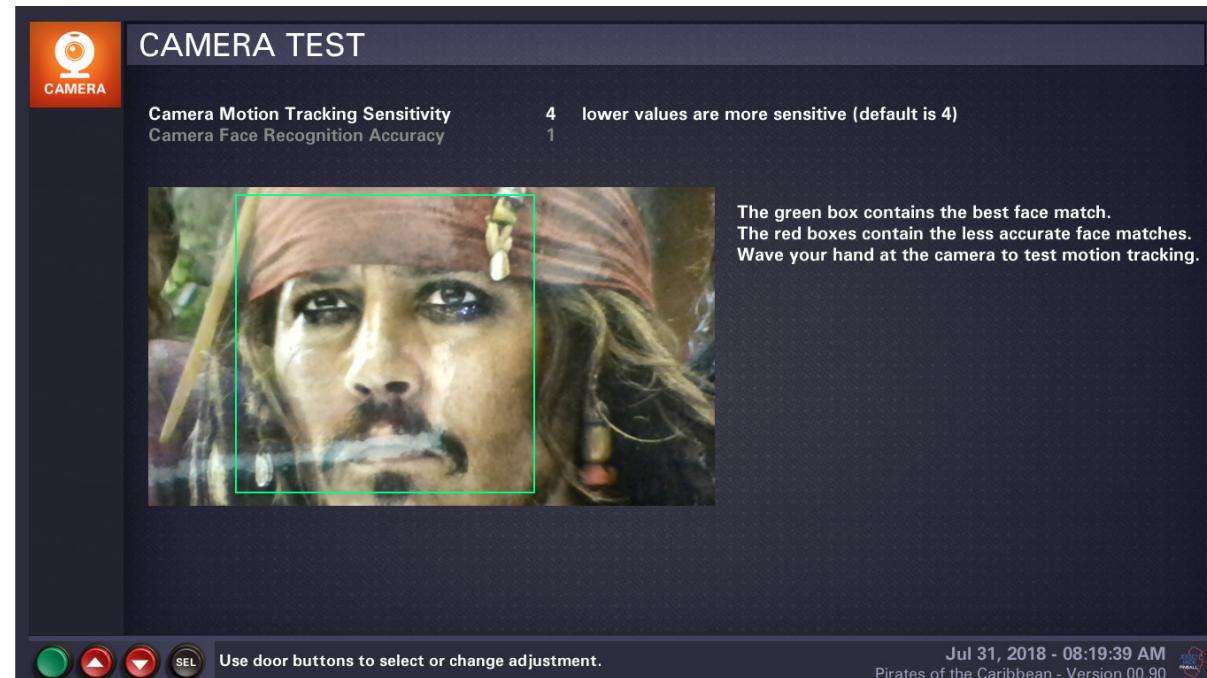
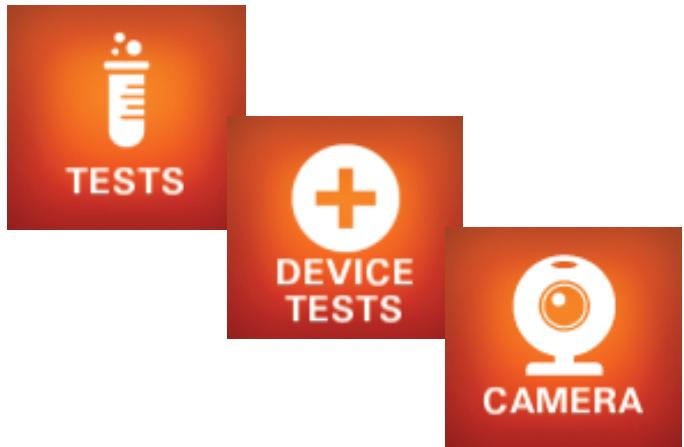


Figure B19. Camera Test screen.

Camera Test

When you enter the **Camera Test**, the LCD monitor will display a screen similar to that shown in figure B19. A large window on the left side of the screen will show what the game's camera (in the lower, center area of the backbox) currently "sees". Within that window, a green box will be placed around (what the software determines to be) the "best match" for a person's face. Red boxes will be placed around (what the software determines to be) "less accurate" face matches. You can wave your hand around to test motion detection. When the software recognizes your hand moving, the words "MOTION DETECTED" will appear, in green, in the center of the screen.

You select a sensitivity control to adjust (motion tracking or face recognition) with the **Up/+** and **Down/-** buttons. The currently selected control will be highlighted in white text. To make a change, press the **Enter** button, then use the **Up/+** and **Down/-** buttons to specify a new numeric value. You are providing relative sensitivity levels for the software to use to recognize faces and detect motion. The game software will apply these levels to the camera image data during game play in order to implement special features. Once you're finished adjusting a numerical value, press the **Enter** button once again to apply the change. To cancel the change, press the **Back/Escape** button.

To exit the **Camera Test** at any time, press the **Back/Escape** button.

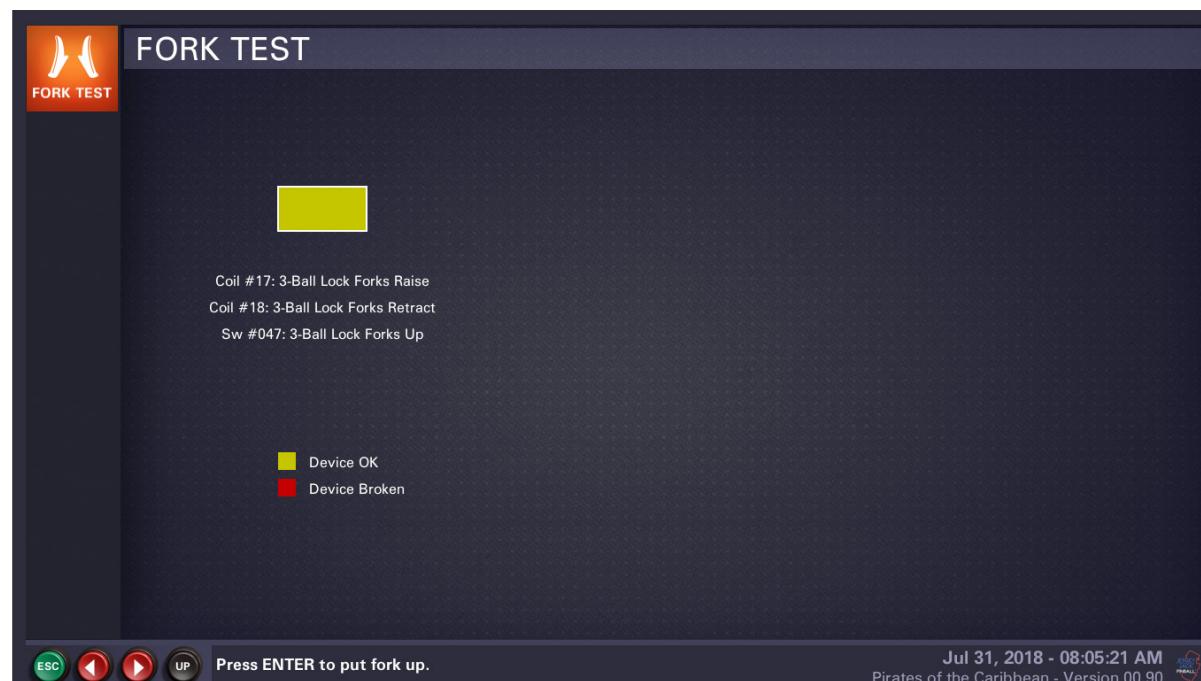
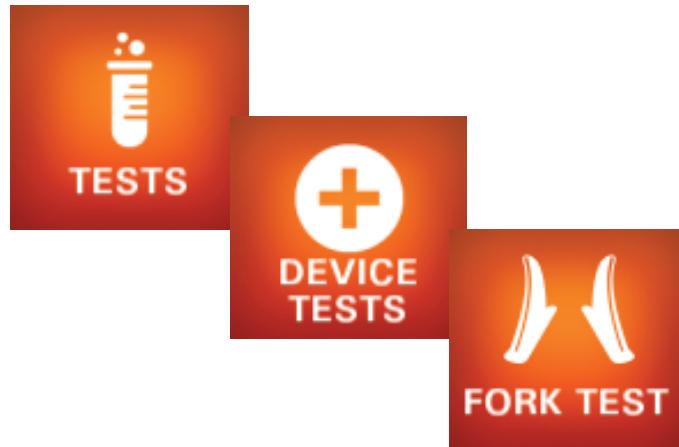


Figure B20. Chest 3-Ball Lock Fork Test screen.

Chest 3-Ball Lock Fork Test

When you enter the **Chest 3-Ball Lock Fork Test**, the LCD monitor will display the screen shown in figure B20. The rectangle on the screen represents the current state of the forks raising mechanism, in the upper left area of the playfield (beneath the treasure chest). A light tan rectangle indicates the forks are in the raised position (above playfield level); a dark tan rectangle indicates the forks are in the lowered position (below playfield level); a red rectangle indicates a "broken" forks raising mechanism (it failed to respond to several attempts to raise the forks). For reference, corresponding coil and matrixed switch numbers are shown under the rectangle. Green text indicates the coil or switch is active; white text indicates that the coil or switch is inactive.

You can use the **Enter** button to toggle the position (raised or lowered) of the forks mechanism.

Note: When the coin door is opened, the game's safety interlock switch (the upper switch on item 4, page C-2 of this manual) disables the 70-volt power running to the playfield. To allow coils to function in the **Chest 3-Ball Lock Fork Test**, you must either close the coin door or pull the safety interlock switch's actuator out (it will "click" and lock in place). When you close the coin door, the interlock switch actuator will be pushed back into its normal (unlocked) position.

To exit the **Chest 3-Ball Lock Fork Test** at any time, press the **Back/Escape** button.

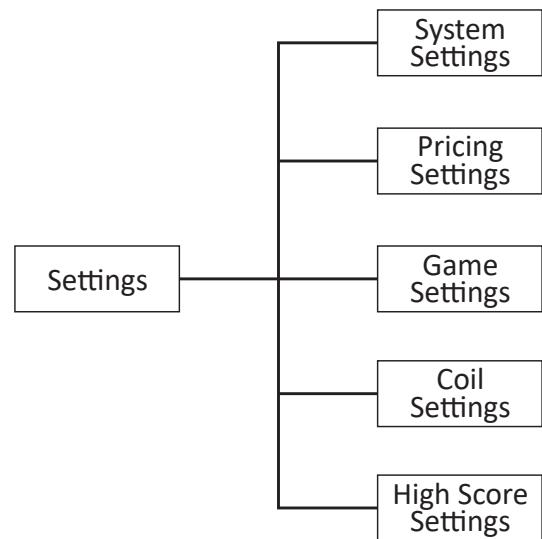


Figure B21. Settings menu tree.

B.3 Settings

The **Settings** menu (see figure B21 for an outline) allows the user to adjust system, pricing, game, coil and high score settings, to personalize the game (home use) or optimally configure it for a location or route (commercial use).

System Settings - adjust settings for high-level game controls such as balls per game, ball save time, tilt warnings, audio levels, match percentage and replay/scoring awards.

Pricing Settings - adjust settings for pricing controls such as free play, accepted currency, coin door specifics and pricing tiers/levels.

Game Settings - adjust game-specific settings such as BOB difficulty, Kickback & Big Bang relight frequency, and Mode, Bonus & Multiball difficulties.

Coil Settings - adjust kicking strength for virtually every coil in the game.

High Score Settings - adjust settings related to high scores such as whether the game will record them, what the award for high score will be, multiple player initials and default high scores.



System Settings

When you enter the **System Settings** menu, the LCD monitor will display the screen shown in figure B23. Settings that have been changed from factory defaults are displayed in red. Default settings are displayed in green, but only when a menu item is highlighted. Menu items that cannot be altered are displayed in gray. You can scroll through menu items with the **Up/+** and **Down/-** buttons; press **Enter** to select an item you would like to change. Use the **Up/+** and **Down/-** buttons to alter the highlighted data value, then press **Enter** to accept the new value. Press **Back/Escape** to escape from a selected menu item without saving changes. NOTE: Pindemption® settings are only available in a POTC game with a Pindemption®-enabled security dongle.

To exit the **System Settings** menu at any time, press the ***Back/Escape*** button.

GENERAL

Game Play Type: specify how the game will end: after a designated number of balls played or a designated amount of time. <Pinemption® setting>

BALLS: traditional style of pinball play Default: BALLS
TIME: timed pinball play

Ball Play Type: specify how extra balls will be played during a game. With the BALLS IN PLAY option, extra balls will be played immediately after the ball on which they are earned. With the BALLS IN RESERVE option, earned extra balls will be held until the end of the game, with players continuing to take turns playing one ball at a time until all balls in reserve have been played.

BALLS IN PLAY: extra ball played immediately Default: BALLS IN PLAY
BALLS IN RESERVE: extra ball held in reserve, to play later

Balls Per Game: specify the number of balls each player gets to play within a single game.
1-5; 1-5 balls Default: 3 balls

Time Per Game: specify how long a game will last. <Pinemption® setting>
30-300: 30-300 seconds Default: 45 seconds

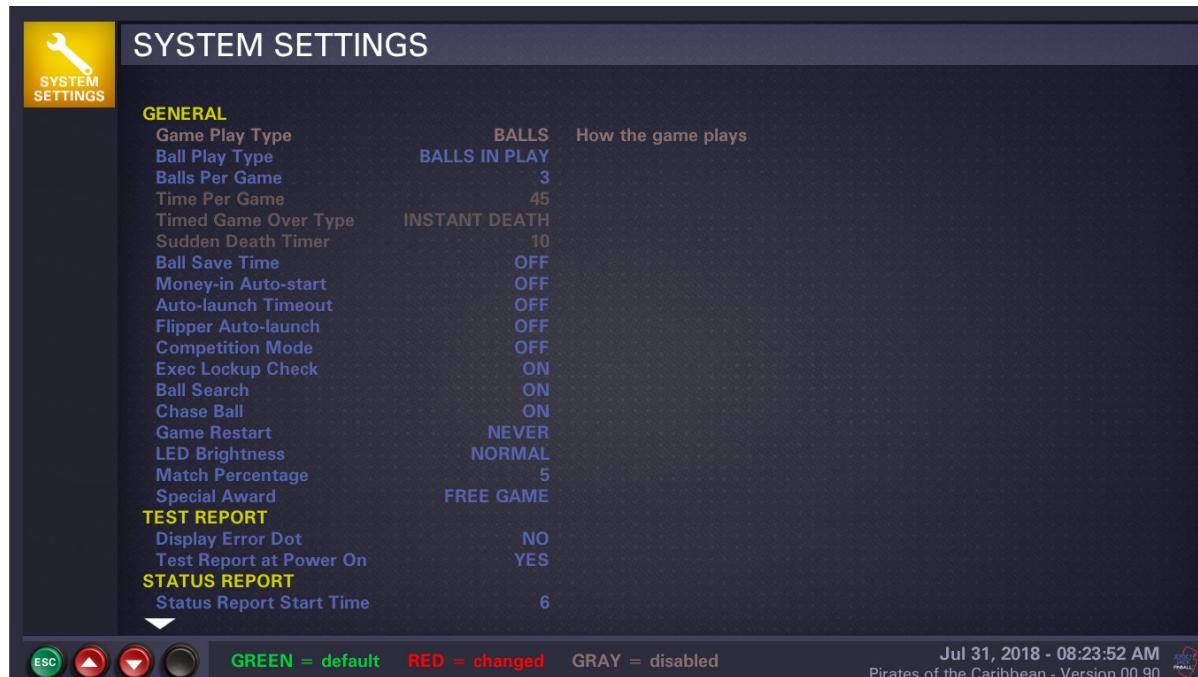


Figure B22. System Settings screen

Timed Game Over Type: specify how a timed game will end. [<PinDEMPTION® setting>](#)

INSTANT DEATH: game ends when timer reaches zero. Default: INSTANT DEATH

SUDDEN DEATH: game ends when timer reaches zero and the ball in play drains.

SUDDEN TIMER: game ends when timer reaches zero and the Sudden Death Timer reaches zero.

Sudden Death Timer: specify the amount of sudden death time. [<PinDEMPTION® setting>](#)

2-15: 2-15 seconds Default: 10 seconds

Ball Save Time: specify the time, from ball launch, up to which the game will Auto-Launch a replacement ball into play, if a player's ball drains for any reason (except a tilt).

OFF: ball save feature disabled Default: OFF

1-20: 1-20 seconds

Money-In Auto-Start: specify whether the game will begin immediately when a credit equivalent, in money, has been inserted or not.

ON: begin game immediately Default: OFF

OFF: do not begin immediately

Auto-Launch Timeout: specify whether the game will auto-launch a served ball from the shooter lane, after a designated period of time or not.

30, 60, 90: 30, 60 & 90 second auto-launch Default: OFF

OFF: never auto-launch a served ball

Flipper Auto-Launch: specify whether the flipper buttons can be used to launch a served ball into play or not.

LEFT FLIPPER: left button launches ball Default: OFF

RIGHT FLIPPER: right button launches ball

EITHER FLIPPER: either button launches ball

BOTH FLIPPERS: both buttons, simultaneously pressed, launch ball

OFF: flipper buttons don't launch ball

Competition Mode: specify whether the game will give random awards and allow carry-over features during gameplay or not.

ON: no random awards or carry-over features Default: OFF

OFF: allow random awards and carry-over features

Chase Ball: specify whether or not a chase ball will be auto-launched into play when ball search cannot locate the ball in play.

ON: use a chase ball Default: ON

OFF: do not use a chase ball

Game Restart: specify how the game responds to the start button being pressed in the middle of a game already in progress.

NEVER: never restart the game Default: NEVER

SLOW: restart the game only if the start button is held in for 1/2 second or more

LED Brightness: specify the intensity level of LEDs under the playfield inserts.

LOW: lowest intensity Default: NORMAL

LOWER: low-medium intensity

NORMAL: medium intensity

HIGH: highest intensity

Match Percentage: specify the desired percentage of games, on average, that will be awarded a match at the end.

OFF: no match feature Default: 5%

1-20: 1-20%

Special Award: specify the award for scoring a Special during a game.

FREE GAME: a free game Default: FREE GAME

EXTRA BALL: an extra ball

POINTS: a predefined number of points

TEST REPORT

Display Error Dot: specify whether to display an error dot on the LCD screen when the game detects a potential problem or not.

YES: display an error dot

Default: NO

NO: do not display an error dot

Test Report at Power On: specify whether or not to display a Test Report Message on the LCD screen, at power on, when the game detects a potential problem.

YES: display a Test Report Message

Default: YES

NO: do not display a Test Report Message

STATUS REPORT

Status Report Start Time: specify how long the player has to hold a flipper down before a game Status Report is displayed.

6-10: 6-10 seconds

Default: 6 seconds

Status Report Display Time: specify how long each page of the Status Report is displayed.

6-20: 6-20 seconds

Default: 6 seconds

KNOCKER

Knocker Strength: specify the knocker's kick strength.

NORMAL: normal kick strength

Default: NORMAL

LOW: low kick strength

Knocker Control: specify whether to allow the knocker to kick or not.

ON: always use the knocker

Default: ON

OFF: disable the knocker

SOMETIMES: occasionally use the knocker

EXTRA BALLS

Game Extra Ball Limit: specify the maximum number of extra balls that can be won in any game.

1-9: 1-9 extra balls

Default: Unlimited

Unlimited: unlimited extra balls

No Extra Balls: no extra balls

Stacked Extra Ball Limit: specify the maximum number of extra balls that can be stacked by a player at any time during a game.

1-9: 1-9 extra balls

Default: Unlimited

Unlimited: unlimited extra balls

No Extra Balls: no extra balls

TILT

Tilt Warning Type: specify whether tilt warnings accumulate per ball or per game.

PER BALL: accumulate per ball

Default: PER GAME

PER GAME: accumulate per game

Tilt Warnings: specify the number of warnings issued before the game tilts.

0-10: 0-10 warnings

Default: 2 warnings

SOUND

Master Volume: specify the overall volume level for the game.

0-50: 0-50 level

Default: 26 level

Front Panel Headphone Volume: specify the headphone volume level for the game.

0-50: 0-50 level

Default: 26 level

Front Panel Volume Control: specify whether the cabinet front controls will change the master volume level or not.

ON: controls change master volume

Default: W/FREE PLAY

OFF: controls do not change master volume

W/FREE PLAY: controls only change master volume in free play

Volume Effect Intensity: specify the intensity of volume effects (multiplies volume units).

1-5: 1-5

Default: 1

Maximum Volume Effect: specify how extra-loud the game can get, in volume units.

1-20: 0-50 level

Default: 5 units

OFF: not used

Music Mix: specify the gain for the music in the game.

0-125: 0-125

Default: 75

Speech Mix: specify the gain for the speech sounds in the game.

0-125: 0-125

Default: 75

Fanfare Mix: specify the gain for the fanfares in the game.

0-125: 0-125

Default: 75

FX Mix: specify the gain for the sound effects (FX) in the game.

0-125: 0-125

Default: 75

Attract Mode Sounds: specify whether the game will play sounds during attract mode or not.

ON: play sounds

Default: ON

OFF: do not play sounds

Attract Mode Music: specify whether the game will play music during attract mode or not.

ON: play music

Default: OFF

OFF: do not play music

REPLAY AWARDS

Replay: specify whether the game will use the automatic replay award system or not. With the automatic replay award system, up to four Replay Score(s) are set by the game and periodically adjusted to maintain the specified Replay Percent below. The number of Replay Levels and the award for reaching any level are selectable below. You can also employ Replay Boosts, if desired.

AUTO: use automatic replay award system

Default: OFF

OFF: no replay awards

Replay Percent: specify the desired replay percentage (Replay: AUTO only).

1-30: 1-30%

Default: 10%

Replay Levels: specify the number of scoring levels for replay awards (Replay: AUTO only). These Replay Scores will be set by the game. If configured, Replay Scores 2, 3 & 4 will be set at 2X, 3X & 4X the first Replay Score.

1-4: 1-4 levels

Default: 1 level

Replay Award: specify the award for achieving any replay level (Replay: AUTO only).

FREE GAME: a free game

Default: FREE GAME

EXTRA BALL: an extra ball

LIGHT SPECIAL: light the Special shot on the playfield

AUDIT: no award, just record in Audits

Replay Boost: specify whether to temporarily boost replay levels (when achieved) or not (Replay:

AUTO only).

ON: use replay boost

Default: ON

OFF: no replay boost

Replay Score: displays the current replay score, which is adjusted automatically by the game.

SCORE AWARDS

Score Award Levels: specify the number of score award levels. With the score award system, you can configure up to four fixed score Levels, along with specific awards for reaching each of those levels. You can also define and employ Score Award Boosts, if desired.

0-4: 0-4 levels

Default: 0 levels

Score Level 1: specify 1st score award level (Score Award Levels: 1-4 only).

20000-500000: 20,000-500,000 points

Default: 30,000 points

Score Level 2: specify 2nd score award level (Score Award Levels: 2-4 only).

50000-1000000: 50,000-1,000,000 points

Default: 75,000 points

Score Level 3: specify 3rd score award level (Score Award Levels: 3-4 only).

85000-2000000: 85,000-2,000,000 points

Default: 950,000 points

Score Level 4: specify 4th score award level (Score Award Levels: 4 only).

100000-3000000: 100,000-3,000,000 points

Default: 150,000 points

Score Award 1: specify award for achieving score level 1 (Score Award Levels: 1-4 only).

FREE GAME: a free game Default: EXTRA BALL

EXTRA BALL: an extra ball

LIGHT SPECIAL: light the Special shot on the playfield

AUDIT: no award, just record in Audits

Score Award 2: specify award for achieving score level 2 (Score Award Levels: 2-4 only).

EXTRA BALL: an extra ball

LIGHT SPECIAL: light the Special shot on the playfield

AUDIT: no award, just record in Audits

Score Award 3: specify award for achieving score level 3 (Score Award Levels: 3-4 only).

EXTRA BALL: an extra ball

LIGHT SPECIAL: light the Special shot on the playfield

AUDIT: no award, just record in Audits

Score Award 4: specify award for achieving score level 4 (Score Award Levels: 4 only).

EXTRA BALL: an extra ball

LIGHT SPECIAL: light the Special shot on the playfield

AUDIT: no award, just record in Audits

Score Award Boost: specify whether to temporarily boost score levels (when achieved) or not (Score Award Levels: 1-4 only).

OFF: no score level boost Default: OFF

10000-200000: 10,000-200,000 point boost

MONITOR

Width Scale: the width extent of the game's LCD screen, in pixels (1000 is the maximum).

Height Scale: the height extent of the game's LCD screen, in pixels (1000 is the maximum).

X Offset: the left offset for the game's LCD screen, in pixels.

Y Offset: the top offset for the game's LCD screen, in pixels.

Pricing Settings



When you enter the **Pricing Settings** menu, the LCD monitor will display the screen shown in figure B23. Settings that have been changed from factory defaults are displayed in red. Default settings are displayed in green, but only when a menu item is highlighted. Menu items that cannot be altered are displayed in gray. You can scroll through menu items with the **Up/+** and **Down/-** buttons; press **Enter** to select an item you would like to change. Use the **Up/+** and **Down/-** buttons to alter the highlighted data value, then press **Enter** to accept the new value. Press **Back/Escape** to escape from a selected menu item without saving changes.

To exit the **Pricing Settings** menu at any time, press the **Back/Escape** button.

Free Play: specify whether the game will play for free or not.

YES: play for free

Default: YES

NO: require currency for play

Currency: specify currency for the game to accept. Default values and currency labels under COIN DOOR and PRICING SCHEME headings change with different types of currency. Values and labels shown below are for Dollars currency.

Dollars (\$): Dollars

Default: Dollars

Euros (€): Euros

Pounds (£): Pounds

Yen (¥): Yen

Krone (kr): Krone

Krona (kr): Krona

Coins: coins

Tokens: tokens

Swipes: card swipes through a reader

Bills: bills through a bill acceptor

Money Limit: specify the maximum amount of money the game can accept at any time.

\$0.00: Unlimited dollar amount

Default: \$0.00

\$0.01-\$100,000.00: \$0.01-\$100,000.00

Credit Limit: specify the maximum number of credits the game can hold at any time.

0: Unlimited credits

Default: 0

1-100: 1-100 credits



Figure B23. Pricing Settings screen.

COIN DOOR

Coin Switch 1 Pulse Amount: specify the amount of currency represented by one pulse from coin switch 1.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$0.25

Coin Switch 2 Pulse Amount: specify the amount of currency represented by one pulse from coin switch 2.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$0.25

Coin Switch 3 Pulse Amount: specify the amount of currency represented by one pulse from coin switch 3.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$0.25

Coin Switch 4 Pulse Amount: specify the amount of currency represented by one pulse from coin switch 4.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$0.25

Coin Switch 5 Pulse Amount: specify the amount of currency represented by one pulse from coin switch 5.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$0.25

Card Reader Installed: specify whether a card reader is installed in the game or not.

YES: card reader installed Default: NO
NO: no card reader installed

PRICING SCHEME

Pricing Levels: specify the number of desired pricing levels (or tiers).

1-10: 1-10 levels Default: 1 level

Tier 1 Cost: specify cost for pricing tier 1.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$1.00

Tier 1 Credits: specify the number of credits for pricing tier 1.

1-100: 1-100 credits Default: 1 credit

Tier 2 Cost: specify cost for pricing tier 2.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$2.00

Tier 2 Credits: specify the number of credits for pricing tier 2.

1-100: 1-100 credits Default: 2 credits

Tier 3 Cost: specify cost for pricing tier 3.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$3.00

Tier 3 Credits: specify the number of credits for pricing tier 3.

1-100: 1-100 credits Default: 3 credits

Tier 4 Cost: specify cost for pricing tier 4.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$4.00

Tier 4 Credits: specify the number of credits for pricing tier 4.

1-100: 1-100 credits Default: 4 credits

Tier 5 Cost: specify cost for pricing tier 5.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$5.00

Tier 5 Credits: specify the number of credits for pricing tier 5.

1-100: 1-100 credits Default: 5 credits

Tier 6 Cost: specify cost for pricing tier 6.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$6.00

Tier 6 Credits: specify the number of credits for pricing tier 6.

1-100: 1-100 credits Default: 6 credits

Tier 7 Cost: specify cost for pricing tier 7.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$7.00

Tier 7 Credits: specify the number of credits for pricing tier 7.

1-100: 1-100 credits Default: 7 credits

Tier 8 Cost: specify cost for pricing tier 8.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$8.00

Tier 8 Credits: specify the number of credits for pricing tier 8.

1-100: 1-100 credits Default: 8 credits

Tier 9 Cost: specify cost for pricing tier 9.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$9.00

Tier 9 Credits: specify the number of credits for pricing tier 9.

1-100: 1-100 credits Default: 9 credits

Tier 10 Cost: specify cost for pricing tier 10.

\$0.01-\$100,000.00: \$0.01-\$100,000.00 Default: \$10.00

Tier 10 Credits: specify the number of credits for pricing tier 10.

1-100: 1-100 credits Default: 10 credits

Game Settings



Figure B24. Game Settings screen.

When you enter the **Game Settings** menu, the LCD monitor will display the screen shown in figure B24. Settings that have been changed from factory defaults are displayed in red. Default settings are displayed in green, but only when a menu item is highlighted. Menu items that cannot be altered are displayed in gray. You can scroll through menu items with the **Up/+** and **Down/-** buttons; press **Enter** to select an item you would like to change. Use the **Up/+** and **Down/-** buttons to alter the highlighted data value, then press **Enter** to accept the new value. Press **Back/Escape** to escape from a selected menu item without saving changes.

To exit the **Game Settings** menu at any time, press the **Back/Escape** button.

GENERAL

Game Number: shown for LE and CE games only.

Topper Idle Brightness: specify the brightness level for the game's topper light (LE & CE games only).
0-16: 0-16 level
Default: 4 level

Topper Attract Mode Animation: specify whether or not to pulse topper in attract mode (CE games only).

ON: display game play tips
OFF: do not display game play tips
Default: OFF

Floating Scores: specify whether to show point values, as they're earned, floating up the display or not.

YES: show floating scores
NO: do not show floating scores
Default: YES

Protips (Codex): specify whether to display game play tips on the game's LCD screen between balls played or not.

ON: display game play tips
OFF: do not display game play tips
Default: ON

CHARACTER SELECT

Random Select Active: specify whether or not to allow the player to enter a special flipper code and have the software randomly select their character (at the beginning of a game).

YES: flipper code random select allowed
NO: flipper code random select not allowed
Default: YES

Blind Character Select: specify whether to allow the player to select their character or have the software randomly select the player's character (at the beginning of a game).

YES: randomly select player's character

Default: NO

NO: allow player to select character

DEVICES

This Game Settings section allows you to disable any broken or otherwise non-functional devices. Below are the possible options & default for each setting:

YES: device disabled

Default: NO

NO: device enabled

Disable Fork Mech: specify whether to disable the 3-Ball Chest Lock Forks mech or not.

Center Up Post Disabled: specify whether to disable the Center Up Post mech or not.

Ship Cannon Door Disabled: specify whether to disable the Ship Cannon Door mech or not.

Left Orbit Up Post Disabled: specify whether to disable the Left Orbit Up Post mech or not.

Map Disc Disabled: specify whether to disable the Map Disc mech or not.

SHIP MOVEMENT

Ship Minimum Speed: specify the minimum rocking speed for the Black Pearl mini PF.

1-32: 1-32 level

Default: 10 level

Base Ship Speed Difficulty: specify the base rocking speed for the Black Pearl mini PF.

1-32: 1-32 level

Default: 16 level

Ship Speed Difficulty Increase: specify the difficulty increase in rocking speed for the Black Pearl mini PF at each completed stage.

1-32: 1-32

Default: 4

Ship Speed Difficulty Decrease: specify the difficulty decrease in rocking speed for the Black Pearl mini PF at each failed stage.

1-32: 1-32

Default: 4

Base Ship Sway Difficulty: specify the base rocking sway for the Black Pearl mini PF.

10-100: 10-100 difficulty level

Default: 25 difficulty level

Ship Sway Difficulty Increase: specify the difficulty increase in rocking sway for the Black Pearl mini PF as play progresses. Note: The Black Pearl sways more and more with each "boarding".

5-50: 5-50

Default: 20

ACTION BUTTON

Enable Button Game Start: specify whether to allow use of the Action Button to start a game or not.

NEVER: do not allow the Action Button
to start a game

Default: NEVER

FREE PLAY: only allow the Action Button to start a game in Free Play mode

PIRATE LANES

Memory: specify whether the PIRATE lanes and/or stand-up target (if unearned) should be "remembered" from ball to ball or not.

1: remember lanes and target
2: remember lanes only
3: reset lanes & target

Default: 1

Extra Ball Memory: specify whether the PIRATE Lanes Extra Ball light (if unearned) should be "remembered" from ball to ball or not.

ON: remember PIRATE Lanes Extra Ball
OFF: reset PIRATE Lanes Extra Ball

Default: ON

Extra Ball: specify the number of PIRATE Lanes completions required to light 1st extra ball.

1-10: 1-10
Default: 6

2nd Extra Ball: specify the number of PIRATE Lanes completions required to light 2nd extra ball.

15-100: 15-100
Default: 20

Big Points Memory: specify whether Big Points progress should be "remembered" from ball to ball or not.

YES: remember Big Points progress
NO: reset Big Points progress

Default: YES

Gold Memory: specify whether Gold progress should be "remembered" from ball to ball or not.

YES: remember Gold progress
NO: reset Gold progress

Default: YES

Argh Frenzy: specify the number of PIRATE Lanes completions required for Argh Frenzy.

1-10: 1-10
Default: 3

2nd Argh Frenzy: specify the number of PIRATE Lanes completions required for 2nd Argh Frenzy.
15-100: 15-100
Default: 15

Hold Bonus X Qualified Stackable: specify whether qualifying Hold Bonus X is stackable or not.
YES: qualified Hold Bonus X stackable
NO: qualified Hold Bonus X not stackable
Default: YES

Hold Bonus X Qualified: specify the number of PIRATE Lanes completions required to add Hold Bonus X to the list of PIRATE awards.
1-10: 1-10
Default: 2

Liar's Dice Qualified: specify the number of PIRATE Lanes completions required to add Liar's Dice game to the list of PIRATE awards.
1-10: 1-10
Default: 3

MOVIE CHAPTERS

Chapter Qualifier Memory: specify the difficulty level for Qualified Chapters Memory.
1: normal
2: difficult
Default: 1 level

Chapter Qualifier Reset On Chapter Start: specify the difficulty level for the Chapter Qualifier Reset.
1: easy
2: normal
Default: 2 level

Chapter Timer Difficulty: specify the difficulty level for the Chapter Timer.
1-5: 1-5 level
Default: 4 level

Chapter Max Timer Add: specify the maximum amount of time that can be added to the Chapter Timer, per chapter.
10-60: 10-60 seconds
Default: 20 seconds

Chapter Spot Character Difficulty: specify whether to light the Spot Character target at chapter start or not.
YES: light the Spot Character target
NO: do not light the Spot Character target
Default: NO

SKULL SCORES

Hold Skull Score Setting: specify how Skull Scores are held.
HIGHEST: highest scores held
RANDOM: random scores held
Default: HIGHEST

PIRATE HURRY UP

Time Difficulty: specify the time difficulty level for the PIRATE Hurry-Up.
1-3: 1-3 level
Default: 2 level

Special Difficulty: specify the number of PIRATE Hurry-Up completions required to add Special to the list of PIRATE Lanes awards.
1-10: 1-10
Default: 3

STARMAP

Starmap Difficulty: specify the difficulty level for selecting Starmap shots.
1-28: 1-28 level
Default: 10 level

Peak Brightness Minimum: specify the minimum peak brightness for the Starmap stars.
5-100: 5-100 level
Default: 25 level

Peak Brightness Maximum: specify the maximum peak brightness for the Starmap stars.
125-255: 125-255 level
Default: 255 level

Minimum Fade Delay: specify the minimum fade delay for the Starmap stars (lower is faster).
1-10: 1-10
Default: 1

Maximum Fade Delay: specify the maximum fade delay for the Starmap stars (higher is slower).
10-30: 10-30
Default: 20

Minimum Restart Delay: specify the minimum wait time until a star flickers again.
1-100: 1-100
Default: 10

Maximum Restart Delay: specify the maximum wait time until a star flickers again.
100-300: 100-300
Default: 250

Starmap Extra Ball Memory: specify whether the Starmap Extra Ball light (if unearned) should be "remembered" from ball to ball or not.
ON: remember Starmap Extra Ball
OFF: reset Starmap Extra Ball
Default: ON

First Starmap Extra Ball: specify the number of Starmap awards required to light 1st extra ball.
1-25: 1-25
Default: 10

Additional Starmap EBs Every: specify the number of Starmap awards required to light subsequent extra balls.

10-75: 10-75

Default: 50

Maximum Extra Balls From Starmap: specify the maximum number of extra balls that can be earned by way of the Starmap (then award switches to bonus points).

0-10: 0-10 extra balls

Default: 5 extra balls

GOLD

Gold Collect Time Difficulty: specify the time difficulty level for collecting Gold from the LCD.

1-3: 1-3 level

Default: 2 level

Gold Rule Difficulty: specify whether the amount of collected Gold should be "remembered" from ball to ball or not.

1: remember collected Gold
2: reset collected Gold

Default: 1

Gold Target Difficulty: specify the main playfield GOLD targets difficulty level for "throwing" Gold on the LCD.

1-8: 1-8 level

Default: 2 level

Upper Playfield Gold Target Difficulty: specify the Black Pearl mini PF SPOT GOLD targets difficulty level.

1-8: 1-8 level

Default: 2 level

BONUS X

Upper Playfield Bonus X Difficulty: specify the Black Pearl mini PF BONUS X targets difficulty level.

1-8: 1-8 level

Default: 2 level

TORTUGA MULTIBALL

Tortuga MB Light Minimum: specify the minimum number of collected Gold pieces required to light Tortuga Multiball.

25-150: 25-150 pieces

Default: 50 pieces

Tortuga MB Light Maximum: specify the maximum number of collected Gold pieces required to light Tortuga Multiball.

150-300: 150-300 pieces

Default: 150 pieces

Tortuga MB Light Increment: specify the increment to the number of collected Gold pieces required to relight Tortuga Multiball with each subsequent multiball.

25-100: 25-100 pieces

Default: 50 pieces

Add-A-Ball Target Difficulty: specify the target difficulty level for Tortuga Multiball Add-A-Ball.

1-8: 1-8 level

Default: 3 level

Upper Playfield Gold Target Difficulty: specify the Black Pearl mini playfield SPOT GOLD targets difficulty level.

1-8: 1-8 level

Default: 3 level

TORTUGA MYSTERY

Game Start Level Spots: specify how many Mystery levels are spotted at the beginning of a game.

0-5: 0-5 levels

Default: 1 level

Mystery Light Difficulty: specify the difficulty level for lighting Mystery.

1-4: 1-4 level

Default: 2 level

Mystery Extra Ball Memory: specify whether the Mystery Extra Ball light (if unearned) should be "remembered" from ball to ball or not.

ON: remember Mystery Extra Ball

Default: ON

OFF: reset Mystery Extra Ball

Allow Tilt Warning Award: specify whether the game can grant an additional tilt warning as a Mystery Award or not.

ON: allow tilt warning Mystery Award

Default: ON

OFF: do not allow tilt warning Mystery Award

MAP MYSTERY

MAP Mystery Extra Ball Memory: specify whether the MAP Mystery Extra Ball light (if unearned) should be "remembered" from ball to ball or not.

ON: remember MAP Mystery Extra Ball

Default: ON

OFF: reset MAP Mystery Extra Ball

MAP Spellout Difficulty: specify the difficulty level for spelling MAP.

1-6: 1-6 level

Default: 2 level

MAP Hole Spots MAP: specify how many M-A-P letters to spot when the MAP hole is hit.

0-3: 0-3 letters

Default: 1 letter

SUPER X

Super X Difficulty: specify the difficulty level for Super X.

1-2: 1-2 level

Default: 1 level

Super X Starting X Value: specify the Super X multiplier at the beginning of a game.

2-6: 2X-6X

Default: 2

Super X Lit Timed: specify whether the lit Super X stand-ups time out or not.

YES: lit stand-ups time out

Default: YES

NO: lit stand-ups do not time out

PLUNDERING

Plunder Level: specify how frequently plundering can occur in the game.

SNOWFLAKE: infrequent plundering

Default: BUCCANEER

LANDLUBBER: more plundering allowed

SOPHOMORE: more plundering allowed

BUCCANEER: more plundering allowed

CUTTHROAT: more plundering allowed

BEDLAM: most frequent plundering

Plunder items: specify how frequently plundering can occur in the game.

1: gold can be plundered

Default: 5

2: points can be plundered

3: treasure can be plundered

4: captain can be plundered

5: balls can be plundered

CURSE OF THE BLACK PEARL MULTIBALL

Board The Pearl Difficulty: specify how often the left orbit sends the ball up to the Black Pearl.

1-5: 1-5 level

Default: 2 level

First Multiball with Spyglass: specify the 1st multiball that will require an extra element (the spyglass) to qualify.

1-5: 1st-5th multiball

Default: 2nd multiball

Spinner Difficulty: specify the difficulty level for how the spinners advance to multiball.

1-4: 1-4 level

Default: 1 level

Initial Spinner Count: specify the number of spinner spins required for the 1st multiball.

20-100: 20-100 spins

Default: 50 spins

Spinner Count Increment: specify the number of spinner spins required for each subsequent multiball.

10-100: 10-100 spins

Default: 75 spins

Maximum Spinner Count: specify the maximum number of spinner spins required for a multiball.

100-1000: 100-1000 spins

Default: 500 spins

Load Cannon Difficulty: specify the difficulty level for opening the cannon door.

1-5: 1-5 level

Default: 2 level

Initial Damage Needed: specify the Dauntless damage level required to light the 1st multiball.

1-5: 1-5 level

Default: 2 level

Ship Damage Increase: specify the Dauntless damage increase required to light each subsequent multiball.

1-3: 1-3 levels

Default: 1 level

Maximum Damage Count: specify the maximum Dauntless damage required to the Dauntless in order to light the 1st multiball.

5-15: 5-15 level

Default: 10 level

DEAD MAN'S CHEST MULTIBALL

Dead Man's Chest MB Virtual Locks: specify whether you want to use virtual ball locks (do not catch and hold balls) for Dead Man's Chest MB or not.

ON: enable chest virtual locks

Default: OFF

OFF: disable chest virtual locks

Dead Man's Chest MB Lock Difficulty: specify the difficulty level for Dead Man's Chest MB locks.

1-6: 1-6 level

Default: 4 level

DEAD MEN TELL NO TALES MULTIBALL

Dead Men Tell No Tales Progress Difficulty: specify the difficulty level for Dead Men Tell No Tales multiball progress.

1-6: 1-6 level

Default: 3 level

AT WORLD'S END MULTIBALL**Nine Pieces Of Eight Shot Difficulty:** specify the difficulty level for the Nine Pieces Of Eight shots.

1-6: 1-6 level

Default: 3 level

ON STRANGER TIDES MULTIBALL**On Stranger Tides Difficulty:** specify the difficulty level for qualifying On Stranger Tides multiball.

1-6: 1-6 level

Default: 2 level

TREASURE COMBOS**Treasure Combo Difficulty:** specify the difficulty level for Treasure Combos.

1-3: 1-3 level

Default: 2 level

Treasure Combo Spot: specify the number of Treasure Combos spotted at the beginning of a game.

0-11: 0-11 treasures

Default: 0 treasures

TREASURE HOARD**Treasure Hoard Timer Difficulty:** specify the difficulty level for the Treasure Hoard timer.

1-3: 1-3 level

Default: 2 level

WIZARD MODE MOVIE 1**Wizard Mode Movie 1 Time Difficulty:** specify the difficulty level for the Movie 1 Wizard Mode timer.

1-3: 1-3 level

Default: 1 level

Wizard Mode Movie 1 Ball Saver: specify whether to use ball saver during wizard mode or not.

YES: use ball saver

Default: YES

NO: do not use ball saver

WIZARD MODE MOVIE 2**Wizard Mode Movie 2 Difficulty:** specify the difficulty level for the Movie 2 Wizard Mode.

1-4: 1-4 level

Default: 4 level

Wizard Mode Movie 2 Bomb Difficulty: specify the bomb difficulty level for the Movie 2 Wizard

Mode.

1-5: 1-5 level

Default: 3 level

Wizard Mode Movie 2 Ball Saver: specify whether to use ball saver during wizard mode or not.

YES: use ball saver

Default: YES

NO: do not use ball saver

WIZARD MODE MOVIE 3**Wizard Mode Movie 3 Ball Saver:** specify whether to use ball saver during wizard mode or not.

YES: use ball saver

Default: YES

NO: do not use ball saver

WIZARD MODE MOVIE 4**Wizard Mode Movie 4 Ball Saver:** specify whether to use ball saver during wizard mode or not.

YES: use ball saver

Default: YES

NO: do not use ball saver

Stage 3 Spinner Spot Target Difficulty: specify the number of spinner spins required to spot targets in Stage 3 of Movie 4 Wizard Mode.

10-100: 10-100 spins

Default: 20 spins

WIZARD MODE MOVIE 5**Wizard Mode Movie 5 Bad Shot Difficulty:** specify the difficulty level for "bad shots" during the Movie 5 Wizard Mode.

1-3: 1-3 level

Default: 2 level

Wizard Mode Movie 5 Ball Saver: specify whether to use ball saver during wizard mode or not.

YES: use ball saver

Default: YES

NO: do not use ball saver

CAMERA**Disable Camera:** specify whether to disable the game's camera or not.

YES: disable the camera

Default: NO

NO: enable the camera

Disable High Score Photos: specify whether to disable high score player photos or not.

YES: disable high score player photos

Default: NO

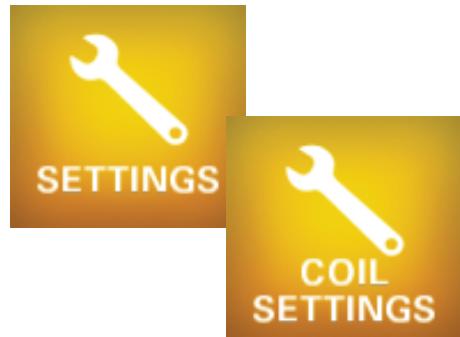
NO: enable high score player photos

Show Attract Mode Camera Message: specify whether to show the camera notification message during attract mode or not.

YES: show the camera message

Default: YES

NO: do not show the camera message



COIL SETTINGS

| | |
|-------------------------------------|---------------------|
| TROUGH | |
| Trough VUK Strength | 15 1=low, 32=max |
| Auto-launch Strength | 24 |
| Trough: Restrict Kickout on Error | YES |
| GENERAL | |
| Kickouts: Restrict Kickout on Error | YES |
| FLIPPERS | |
| Left Flipper Strength | 22 |
| Right Flipper Strength | 25 |
| Upper Left Flipper Strength | 18 |
| Upper PF Left Flipper Strength | 18 |
| Upper PF Right Flipper Strength | 18 |
| BUMPERS | |
| Bumper 1 Strength (Top) | 24 |
| Bumper 2 Strength | 24 |
| Bumper 3 Strength | 24 |
| Bumper 4 Strength | 24 |
| SLINGSHOTS | |
| Left Slingshot Strength | 24 |
| Right Slingshot Strength | 24 |
| Top Slingshot Strength | 20 |
| GENERAL | |
| Maximum Shaker Strength | MEDIUM |
| Bumper Spinner Strength | 4 |

ESC SEL GREEN = default RED = changed GRAY = disabled Jul 31, 2018 - 08:26:10 AM Pirates of the Caribbean - Version 0.90

Figure B25. Coil Settings screen.

Coil Settings

When you enter the **Coil Settings** menu, the LCD monitor will display the screen shown in figure B25. Settings that have been changed from factory defaults are displayed in red. Default settings are displayed in green, but only when a menu item is highlighted. Menu items that cannot be altered are displayed in gray. You can scroll through menu items with the **Up/+** and **Down/-** buttons; press **Enter** to select an item you would like to change. Use the **Up/+** and **Down/-** buttons to alter the highlighted data value, then press **Enter** to accept the new value. Press **Back/Escape** to escape from a selected menu item without saving changes.

From the **Coil Settings** menu, virtually every single coil strength in the game is adjustable. This feature allows the owner/operator to fine tune game play and operation for specific uses.

CAUTION: Be careful when adjusting the values in this menu; making certain coils too strong can result in breakage or excessive wear on certain parts of the game.

To exit the **Coil Settings** menu at any time, press the **Back/Escape** button.

TROUGH

Trough VUK Strength: specify the firing strength for the trough VUK coil.
1-32: 1-32 firing strength Default: 15

Auto-Launch Strength: specify the firing strength for the ball Auto-Launch coil.
1-32: 1-32 firing strength Default: 24

Trough: Restrict Kickout on Error: specify whether or not to restrict ball kickout and game start functions when a trough error is encountered.

YES: restrict ball kickout/start functions Default: YES
NO: do not restrict ball kickout/start functions

GENERAL

Kickouts: Restrict Kickout on Error: specify whether or not to restrict ball kickouts on other devices when an opto switch failure is encountered.

YES: restrict ball kickouts

Default: YES

NO: do not restrict ball kickouts

Maximum Shaker Strength: specify the strength for the shaker motor.

OFF: disable the shaker motor

Default: MEDIUM

LOW: low strength

MEDIUM: medium strength

HIGH: high strength

EXTREME: extreme strength (adjust to EXTREME at your own risk!)

Bumper Spinner Strength: specify the spinner strength for the spinning pop bumper sculptures (LE & CE games only).

2-5: 2-5 spinning strength

Default: 4

Ship Door Hold Strength: specify the hold strength for the Black Pearl Cannon Load Door.

1-16: 1-16 hold strength

Default: 12

FLIPPERS

Left Flipper Strength: specify the firing strength for the left flipper power coil.

1-32: 1-32 firing strength

Default: 22

Right Flipper Strength: specify the firing strength for the right flipper power coil.

1-32: 1-32 firing strength

Default: 25

Upper Left Flipper Strength: specify the firing strength for the upper left flipper power coil.

1-32: 1-32 firing strength

Default: 18

Upper PF Left Flipper Strength: specify the firing strength for the Black Pearl left flipper power coil.

1-32: 1-32 firing strength

Default: 18

Upper PF Right Flipper Strength: specify the firing strength for the Black Pearl right flipper power coil.

1-32: 1-32 firing strength

Default: 18

BUMPERS

Bumper 1 (Upper) Strength: specify the firing time for the upper pop bumper coil.

20-36: 20-36 milliseconds

Default: 24 milliseconds

Bumper 2 (Upper Middle) Strength: specify the firing time for the upper middle pop bumper coil.

20-36: 20-36 milliseconds

Default: 24 milliseconds

Bumper 3 (Lower Middle) Strength: specify the firing time for the lower middle pop bumper coil.

20-36: 20-36 milliseconds

Default: 24 milliseconds

Bumper 4 (Lower) Strength: specify the firing time for the lower pop bumper coil.

20-36: 20-36 milliseconds

Default: 24 milliseconds

SLINGSHOTS

Left Slingshot Strength: specify the firing time for the left slingshot coil.

20-30: 20-30 milliseconds

Default: 22 milliseconds

Right Slingshot Strength: specify the firing time for the right slingshot coil.

20-30: 20-30 milliseconds

Default: 22 milliseconds

Top Slingshot Strength: specify the firing time for the top slingshot coil.

15-25: 15-25 milliseconds

Default: 20 milliseconds

VERTICAL UP KICKERS

Left Scoop Kick Strength: specify the firing strength for The Depths Scoop coil.
1-32: 1-32 firing strength Default: 14

Chest Release Fire Time: specify the firing time for the treasure chest ball release mini coil.
1-5: 1-5 fire time Default: 3

UP POSTS

High Score Settings

When you enter the **High Score Settings** menu, the LCD monitor will display the screen shown in figure B26. Settings that have been changed from factory defaults are displayed in red. Default settings are displayed in green, but only when a menu item is highlighted. Menu items that cannot be altered are displayed in gray. You can scroll through menu items with the **Up/+** and **Down/-** buttons; press **Enter** to select an item you would like to change. Use the **Up/+** and **Down/-** buttons to alter the highlighted data value, then press **Enter** to accept the new value. Press **Back/Escape** to escape from a selected menu item without saving changes.

To exit the **High Score Settings** menu at any time, press the **Back/Escape** button.

GAME FEATURE HIGH SCORES

Loop Champ Credits: specify the number of credits awarded for Loop Champ.

0-10: 0-10 credits

Default: 0 credits

Biggest Spender Credits: specify the number of credits awarded for Biggest Spender.

0-10: 0-10 credits

Default: 0 credits

Most Gold Collected Credits: specify the number of credits awarded for Most Gold Collected.

0-10: 0-10 credits

Default: 0 credits

Arrr Frenzy Credits: specify the number of credits awarded for best Arrr Frenzy score.

0-10: 0-10 credits

Default: 0 credits

Wizard Mode 1 Credits: specify the number of credits awarded for Wizard Mode 1 Champ.

0-10: 0-10 credits

Default: 0 credits

Wizard Mode 2 Credits: specify the number of credits awarded for Wizard Mode 2 Champ.

0-10: 0-10 credits

Default: 0 credits

Wizard Mode 3 Credits: specify the number of credits awarded for Wizard Mode 3 Champ.

0-10: 0-10 credits

Default: 0 credits

Wizard Mode 4 Credits: specify the number of credits awarded for Wizard Mode 4 Champ.

0-10: 0-10 credits

Default: 0 credits



Figure B26. High Score Settings screen.

H.S.T.D. 5 Credits: specify the number of credits awarded for high score to date #5
0-10: 0-10 credits Default: 0 credits

H.S.T.D. 6 Credits: specify the number of credits awarded for high score to date #6
0-10: 0-10 credits Default: 0 credits

H.S.T.D. 7 Credits: specify the number of credits awarded for high score to date #7
0-10: 0-10 credits Default: 0 credits

H.S.T.D. 8 Credits: specify the number of credits awarded for high score to date #8
0-10; 0-10 credits Default: 0 credits

Default Grand Champ: specify the default Grand Champion score.
500000-1000000: 500,000-1,000,000 points Default: 500,000 points

Default H.S.T.D. 1: specify the default high score to date #1.
400000-900000: 400 000-900 000 points Default: 400 000 points

Default H.S.T.D. 2: specify the default high score to date #2.
300000-800000; 300 000-800 000 points Default: 300 000 points

Default H.S.T.D. 3: specify the default high score to date #3.
250000-700000; 250 000-700 000 points Default: 250 000 points

Default H.S.T.D. 4: specify the default high score to date #4.
300000-600000; 300,000-600,000 points Default: 200,000 points

Default H.S.T.D. 5: specify the default high score to date #5.
150,000-500,000; 150,000-500,000 points Default: 150,000 points

Default H.S.T.D. 6: specify the default high score to date #6.
125000-400000: 125,000-400,000 points Default: 125,000 points

Default H.S.T.D. 7: specify the default high score to date #7.
100000-250000: 100,000-250,000 points Default: 100,000 points

Default H.S.T.D. 8: specify the default high score to date #8.
75000-200000: 75,000-200,000 points Default: 75,000 points

DAILY HIGH SCORES

Keep Daily High Scores: specify whether the game will maintain a table of high scores or not.
ON: track & display daily high scores Default: ON

Minimum Score: specify the minimum score to qualify for the daily high scores table.
10000-100000;10,000-100,000 points Default: 20,000 points

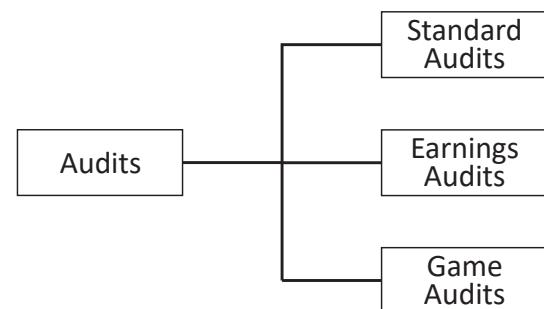


Figure B27. Audits menu tree.

B.4 Audits

The **Audits** menu (see figure B27 for an outline) allows the user to view, monitor and/or track game usage and earnings over a specific time period (since audits were last cleared and over the lifetime of the game).

Standard Audits - view game-related totals such as free plays, 1-, 2-, 3- & 4-player games started, extra balls, replays, matches, etc.

Earnings Audits - view totals for paid credits, free plays, service credits, pricing tier purchases and coins accepted in each slot.

Game Audits - view totals for various shots made (targets hit or switches closed) and modes started and/or completed in the game.

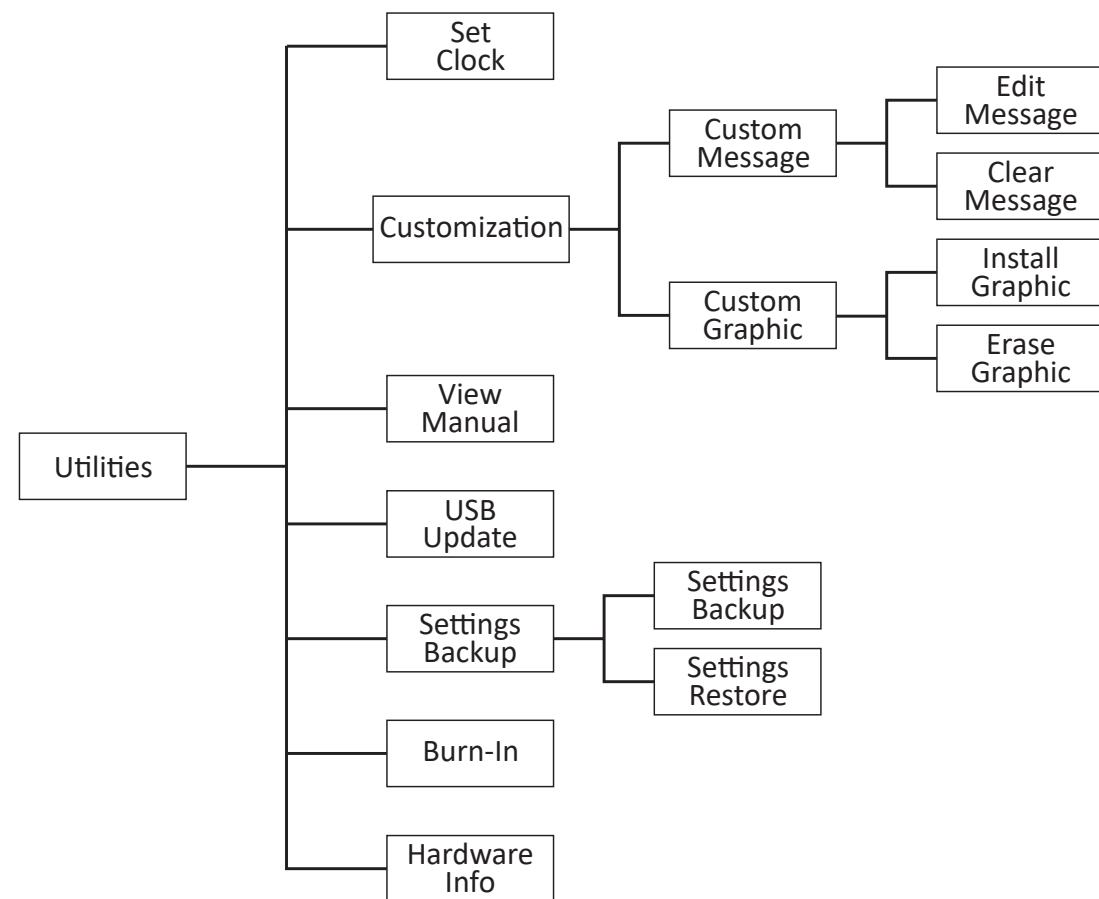


Figure B28. Utilities menu tree.

B.5 Utilities

The **Utilities** menu (see figure B28 for an outline) allows the user to manage and maintain the game by setting the internal clock, entering messages/graphics and through commonly-used routines like burn-in and software update. There are also utility screens to save/restore settings and view this manual and/or game hardware information.

Set Clock - adjust the system date and time.

Customization - customize your game: enter/modify a message for the game to display in attract mode (**Custom Message > Edit Message**), clear an existing message (**Custom Message > Clear Message**), upload/select an image (**Custom Graphic > Install Graphic**) for the game to display in attract mode or erase a previously uploaded graphic with the **Custom Graphic > Erase Graphic** utility.

View Manual - display/navigate the PDF version of the POTC manual on the game's LCD screen.

USB Update - update the game's software via a USB memory stick. Note: The update must be downloaded from the JJP® support website (<https://www.jerseyjackpinball.com/support/>), using a separate computer.

Settings Backup - backup (**Settings Backup**) and/or restore (**Settings Restore**) settings, audits, replay information and custom message for the game.

Burn-In - run a preset routine to exercise all of the critical devices in the game, repeatedly, to test for reliable, long-term system operation.

Hardware Info - view game hardware characteristics such as game serial number, firmware revision levels, motherboard type, display Information, available RAM, processor speed & solid state disk size.



Set Clock

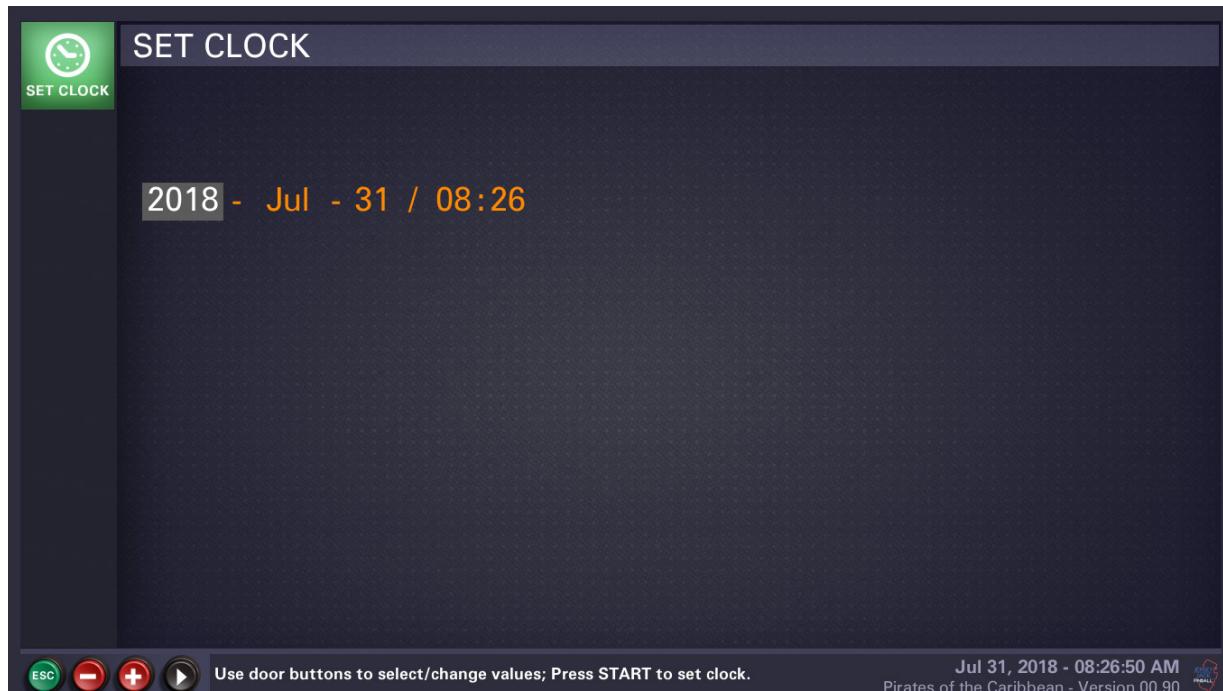


Figure B29. Set Clock utility screen.

When you enter the **Set Clock** utility, the LCD monitor will display the screen shown in figure B29. To maneuver to the portion of the display that requires adjustment, use the **Back/Escape** (left) and **Enter** (right) buttons. Use the **Up/+** and **Down/-** buttons to alter the highlighted value, then press the **Start** button to save the time and date, as displayed on the screen.

To exit the **Set Clock** utility, move the cursor to the position shown in Figure B29 (far left), then press the **Back/Escape** button. Note: The **Start** button moves the cursor to this position after saving the time/date.



Figure B30. Edit Message utility screen.

Edit Message

Use the **Custom Message** utility to enter a message that will be displayed on the LCD monitor, periodically, during the game's attract mode. The message is entered or modified using the **Edit Message** utility.

When you enter the **Edit Message** utility, the LCD monitor will display the screen shown in figure B30. To move the cursor around in the message, use the **Back/Escape** (move left) and **Enter** (move right) buttons. Use the **Up/+** and **Down/-** buttons to change the highlighted character, then press the **Start** button to save your custom message, as displayed on the screen.

To exit the **Edit Message** utility, move the cursor to the position shown in Figure B30 (the upper left hand corner), then press the **Back/Escape** button. Note: The **Start** button moves the cursor to this position after saving the message.

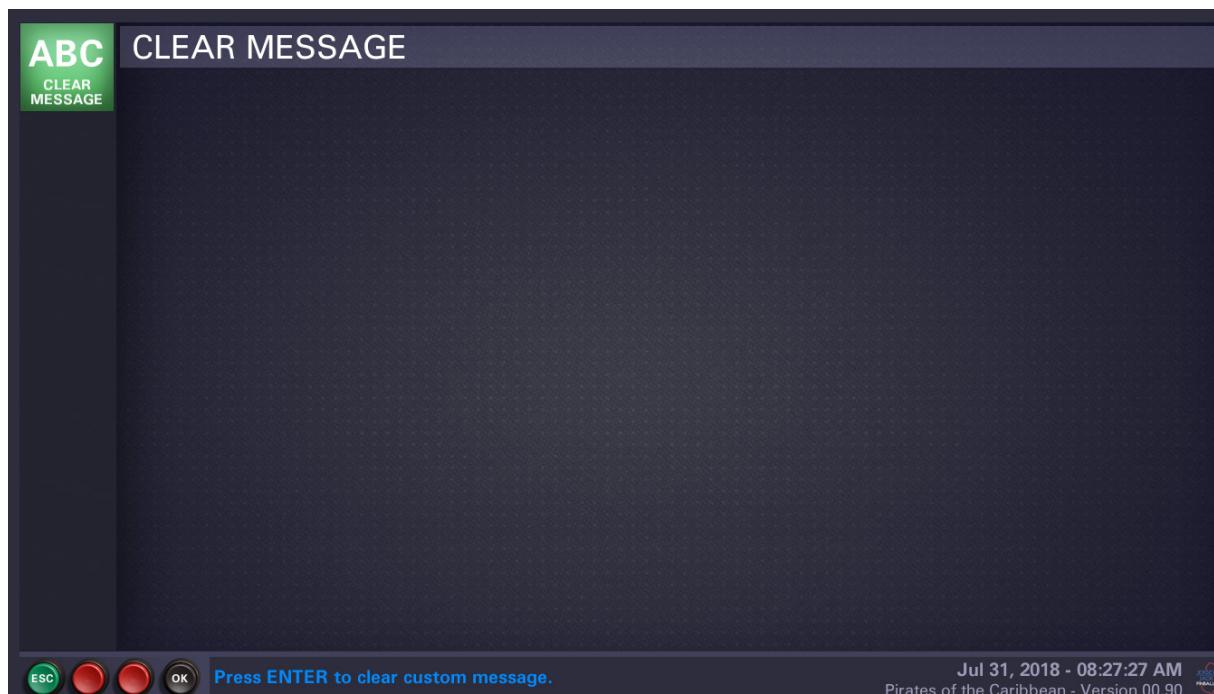
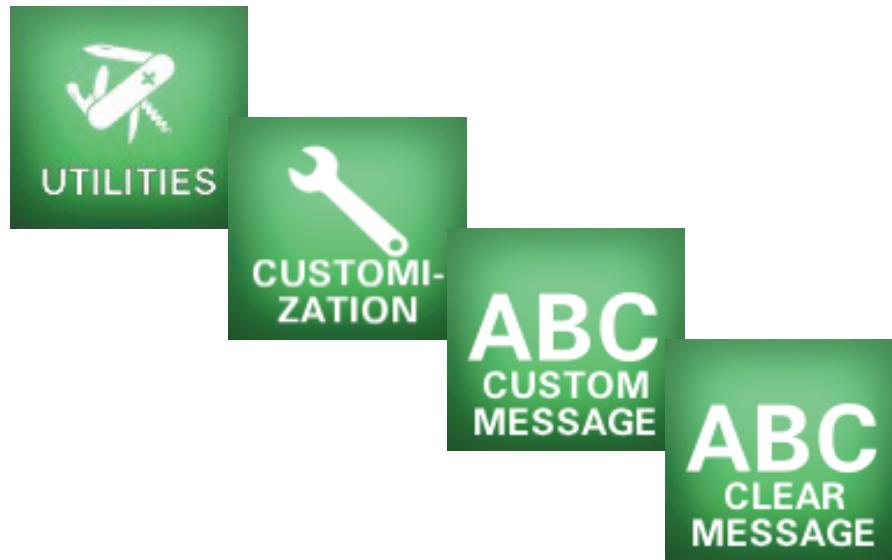


Figure B31. Clear Message utility screen.

Clear Message

Use the **Clear Message** utility to delete a previously entered custom message.

When you enter the **Clear Message** utility, the LCD monitor will display the screen shown in figure B31. To clear the current custom message, press the **Enter** button. You will be prompted to hit the **Start** button to confirm and complete the operation.

To exit the **Clear Message** utility at any time, press the **Back/Escape** button.

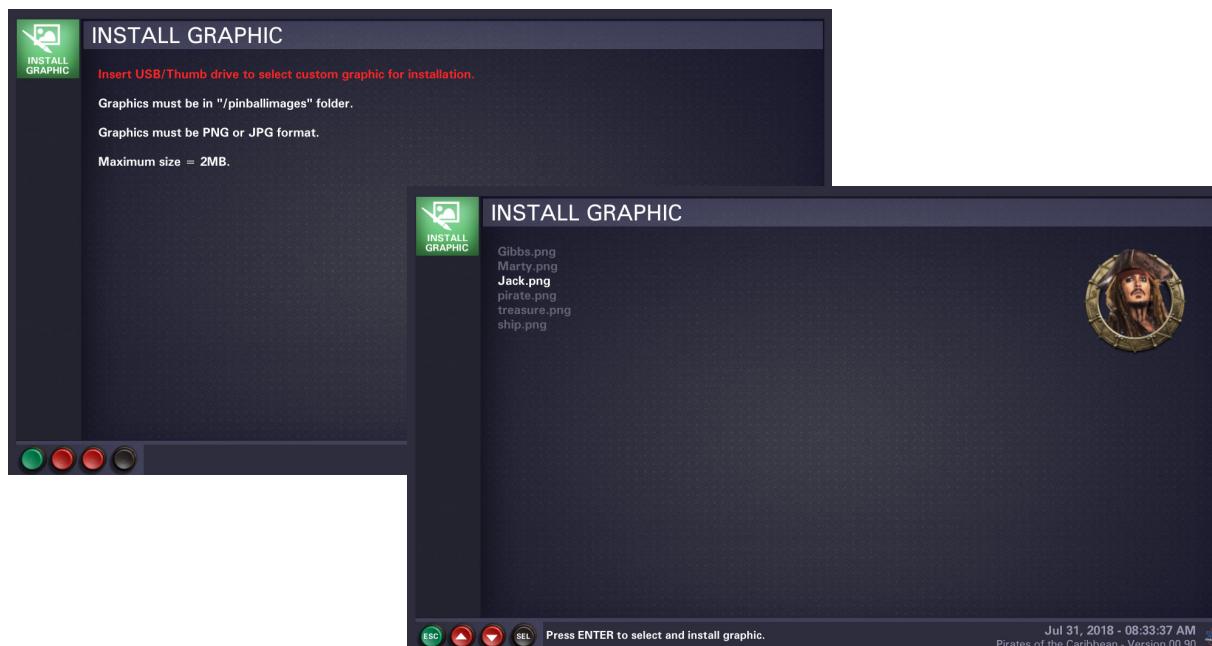


Figure B32. Install Graphic utility screens.

Install Graphic

Use the **Custom Graphic** utility to install an image that will be displayed on the LCD monitor, periodically, during the game's attract mode. The custom image is uploaded or changed using the **Install Graphic** utility.

Note: The image must be loaded onto a USB memory stick, using a separate computer. It must be in PNG or JPG format and under 2MB in size. Create a folder named "pinballimages" in the root directory of the USB stick, then copy your graphic(s) into the folder. Power up the game, open the coin door, and use the diagnostics buttons to enter the **Install Graphic** utility; the LCD monitor will display the screen shown on the left in figure B32.

Locate the end of the USB extension cable, just inside the open coin door. Fully insert the USB stick into the connector at the end of the cable (if your USB stick is equipped with an "in-use" light, it will illuminate). The screen on the right in figure B32 will come up automatically, showing a listing of the available graphics in your USB stick's "pinballimages" folder.

Use the **Up/+** and **Down/-** buttons to select the graphic you wish to install, then press the **Enter** button to complete the operation.

To exit the **Install Graphic** utility at any time, press the **Back/Escape** button.



Erase Graphic



Figure B33. Erase Graphic utility screen.

Use the **Erase Graphic** utility to delete a previously installed custom graphic.

When you enter the **Erase Graphic** utility, the LCD monitor will display the screen shown in figure B33. To clear the current custom graphic, press the **Enter** button. You will be prompted to hit the **Start** button to confirm and complete the operation.

To exit the **Erase Graphic** utility at any time, press the **Back/Escape** button.

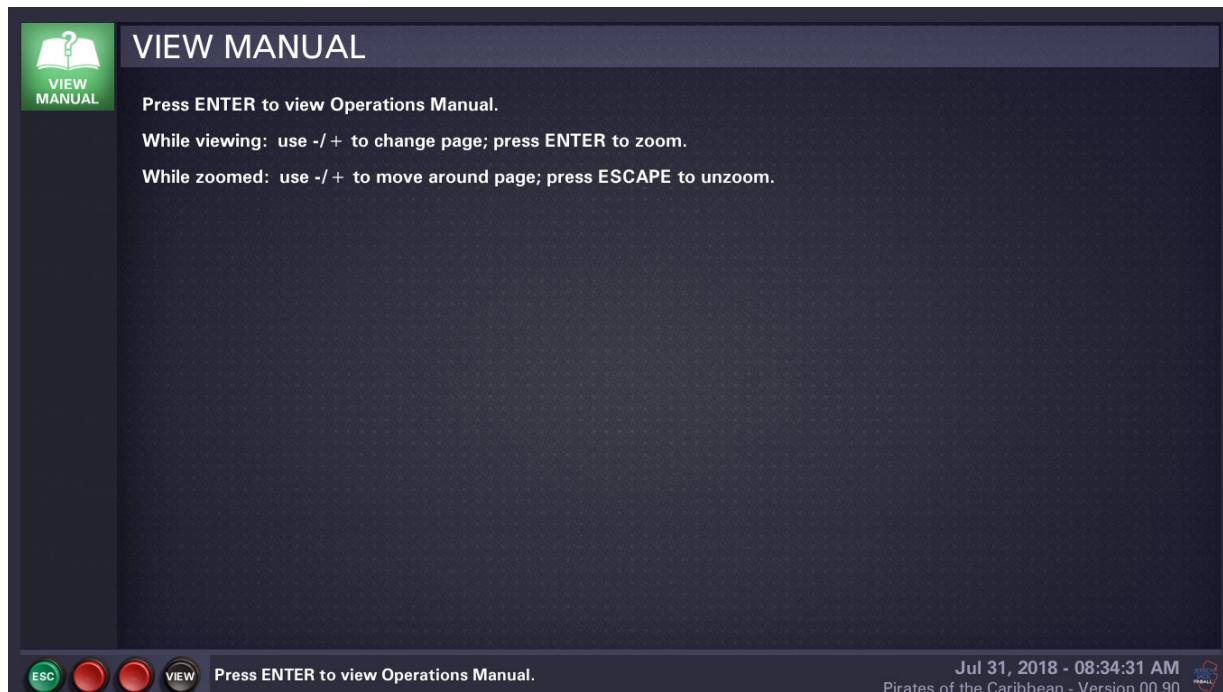


Figure B34. View Manual utility screen.

View Manual

When you enter the **View Manual** utility, the LCD monitor will display the screen shown in figure B34. To view the POTC Operations Manual (this document), press the **Enter** button. While viewing, use the **Up/+** and **Down/-** buttons to move from page to page; use the **Enter** button to zoom in on the current page. When zoomed in, use the **Up/+** and **Down/-** buttons to move around the current page; use the **Back/Escape** button to cancel the zoom function.

To exit the **View Manual** utility, press the **Back/Escape** button while in the viewing mode.

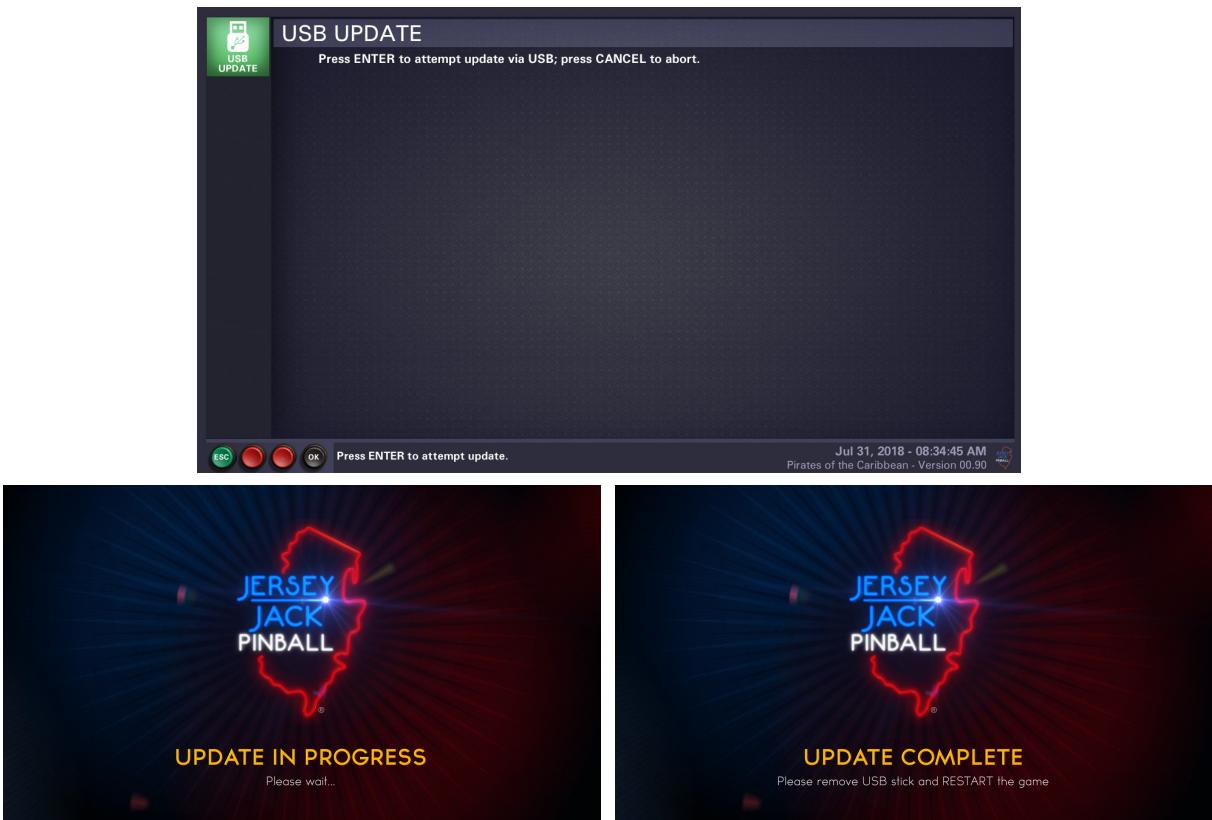


Figure B35. USB Update utility screens.

USB Update

Use the **USB Update** utility to apply a POTC delta software update to your game. Note: The update must be downloaded from the JJP® support website (<https://www.jerseyjackpinball.com/support/>), using a separate computer. Copy the “potc_update” folder from your computer onto an empty USB memory stick (i.e. it should be the only folder on the stick). Power up the game, open the coin door, and use the diagnostics buttons to enter the **USB Update** utility; the LCD monitor will display the screen shown on top in figure B35.

Locate the end of the USB extension cable, just inside the open coin door. Fully insert the USB stick into the connector at the end of the cable (if your USB stick is equipped with an “in-use” light, it will illuminate).

To attempt the USB delta update, press the **Enter** button. The game’s playfield will go dark for approximately 15-30 seconds (depending upon the size of the update); the LCD monitor will display the bottom, left screen in figure B35. You can abort the update process by pressing the **Back/Escape** button. When the delta update is complete, the LCD monitor will display the bottom, right screen in figure B35, prompting you to remove the USB stick and restart the game. Power the game down, remove your USB stick from the end of the USB cable, then power the game back up again. Once the game has rebooted, verify that the delta update installed successfully by re-entering the POTC Menu System. The installed software version is displayed in the lower, right hand corner of most menu system screens.

To exit the **USB Update** utility, press the **Back/Escape** button.

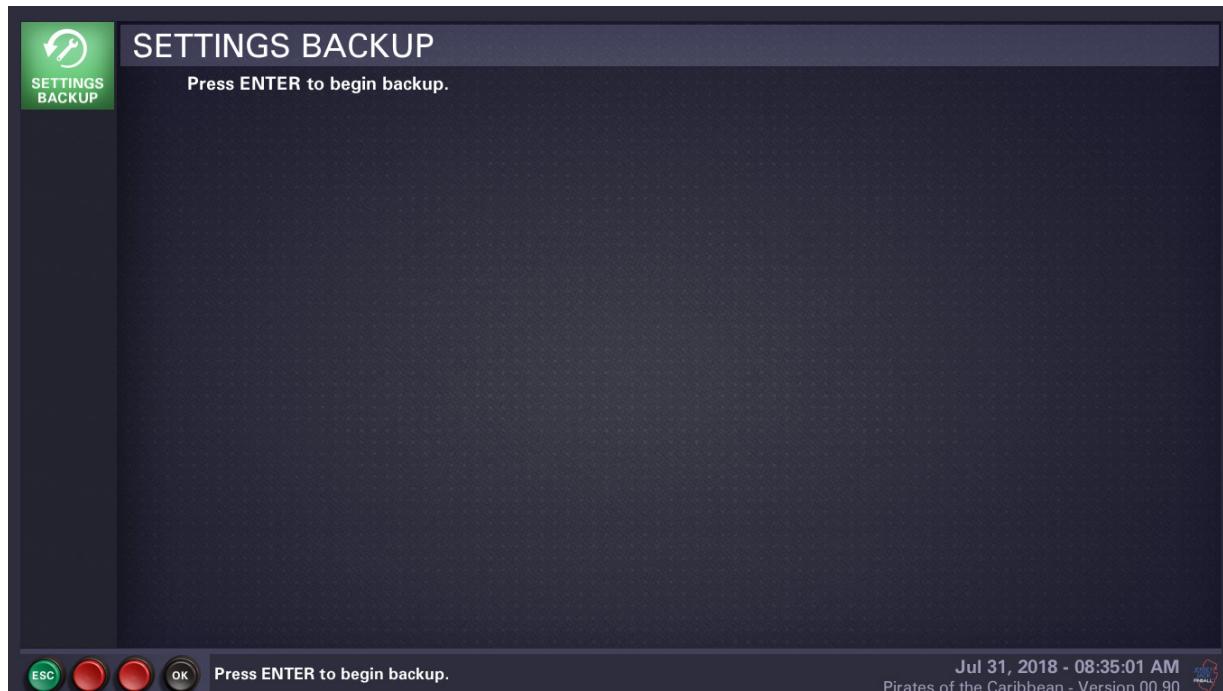


Figure B36. Settings Backup utility screen.

Settings Backup

The **Settings Backup & Settings Restore** utilities allow you to quickly and easily backup & restore your game's settings, audits, reports, replay information and custom message. Your settings will be stored on a USB memory stick.

When you enter the **Settings Backup** utility, the LCD monitor will display the screen shown in figure B36. Locate the end of the USB extension cable, just inside the open coin door. Fully insert a USB stick into the connector at the end of the cable (if your USB stick is equipped with an "in-use" light, it will illuminate).

Note: The saved settings file is unique to each game (allowing you to use the same USB stick to backup settings for several different games, without fear of overwriting anything). The file is also time- and date-stamped, using the game's internal clock.

Press the **Enter** button to perform the backup. If there is an existing settings file for the game on the USB stick, you will be prompted to hit the **Start** button to confirm and complete overwriting the backup.

To exit the **Settings Backup** utility, press the **Back/Escape** button.



Figure B37. Settings Restore utility screen.

Settings Restore

The **Settings Backup & Settings Restore** utilities allow you to quickly and easily backup & restore your game's settings, audits, reports, replay information and custom message. Your settings will be restored from a USB memory stick.

When you enter the **Settings Restore** utility, the LCD monitor will display the screen shown in figure B37. Locate the end of the USB extension cable, just inside the open coin door. Fully insert the USB stick containing your settings file into the connector at the end of the cable (if your USB stick is equipped with an "in-use" light, it will illuminate).

Note: The saved settings file is unique to each game (so you can use the same USB stick to backup settings for several different games, without fear of overwriting anything). The file is also time- and date-stamped, using the game's internal clock.

If a settings file for the game is found on the USB stick, its date and time will be displayed as shown in figure B37. Press the **Enter** button to perform the settings restore operation.

To exit the **Settings Restore** utility, press the **Back/Escape** button.



Burn In

The **Burn In** utility allows you to repeatedly exercise/test virtually all of the critical devices in the POTC game. When you enter the utility, the game will cycle through a preset routine to simultaneously fire coils, activate magnets, run motors, flash colors on the LCD screen, play sounds, etc. - indefinitely.

To exit the **Burn In** utility at any time, press the **Back/Escape** button.



Hardware Info

The screenshot shows the 'HARDWARE INFO' utility interface. At the top left is a 'HARDWARE INFO' button with a tag icon. The main area displays system specifications:

- Serial 0, country 0 (not set), HW id 0, model 0 (), num 0, max 0
- I/O Board: JJP-IO-REV00-XXXXXX
- Machine: Mobo: MSI model: H81M-P33 (MS-7817) v: 1.0
- Bios: American Megatrends v: V1.21B1 date: 12/11/2015
- CPU: Dual core Intel Celeron G1840 (-MCP-) cache: 2048 KB
- clock speeds: max: 2800 MHz 1: 2794 MHz 2: 2800 MHz
- Memory: Array-1 capacity: 32 GB devices: 4 EC: None
 - Device-1: ChannelA-DIMM0 size: 4 GB speed: 1333 MHz type: DDR3
 - Device-2: ChannelA-DIMM1 size: No Module Installed type: N/A
 - Device-3: ChannelB-DIMM0 size: No Module Installed type: N/A
 - Device-4: ChannelB-DIMM1 size: No Module Installed type: N/A
- Drives: HDD Total Size: 32.0GB (17.8% used) ID-1: /dev/sda model: SanDisk_SD8SBAT0 size: 32.0GB
- HDMI1 connected primary 1920x1080+0+0 (normal left inverted right x axis y axis) 368mm x 207mm
- VGA1 connected 1024x768+1920+0 (normal left inverted right x axis y axis) 0mm x 0mm
- HDMI-1-1 disconnected
- VGA-1-1 connected 1024x768+2944+0 0mm x 0mm

At the bottom, there are four circular buttons labeled 'ESC', 'Red', 'Green', and 'Black'. The status bar at the bottom right shows 'Jul 31, 2018 - 08:35:45 AM' and 'Pirates of the Caribbean - Version 00.90'.

Figure B38. Hardware Info utility screen.

Use the **Hardware Info** utility to view your game's hardware characteristics such as serial number, firmware revision levels, motherboard type, available RAM, processor speed & solid state disk size. When you enter the **Hardware Info** utility, the LCD monitor will display the screen shown in figure B38.

To exit the **Hardware Info** utility at any time, press the **Back/Escape** button.

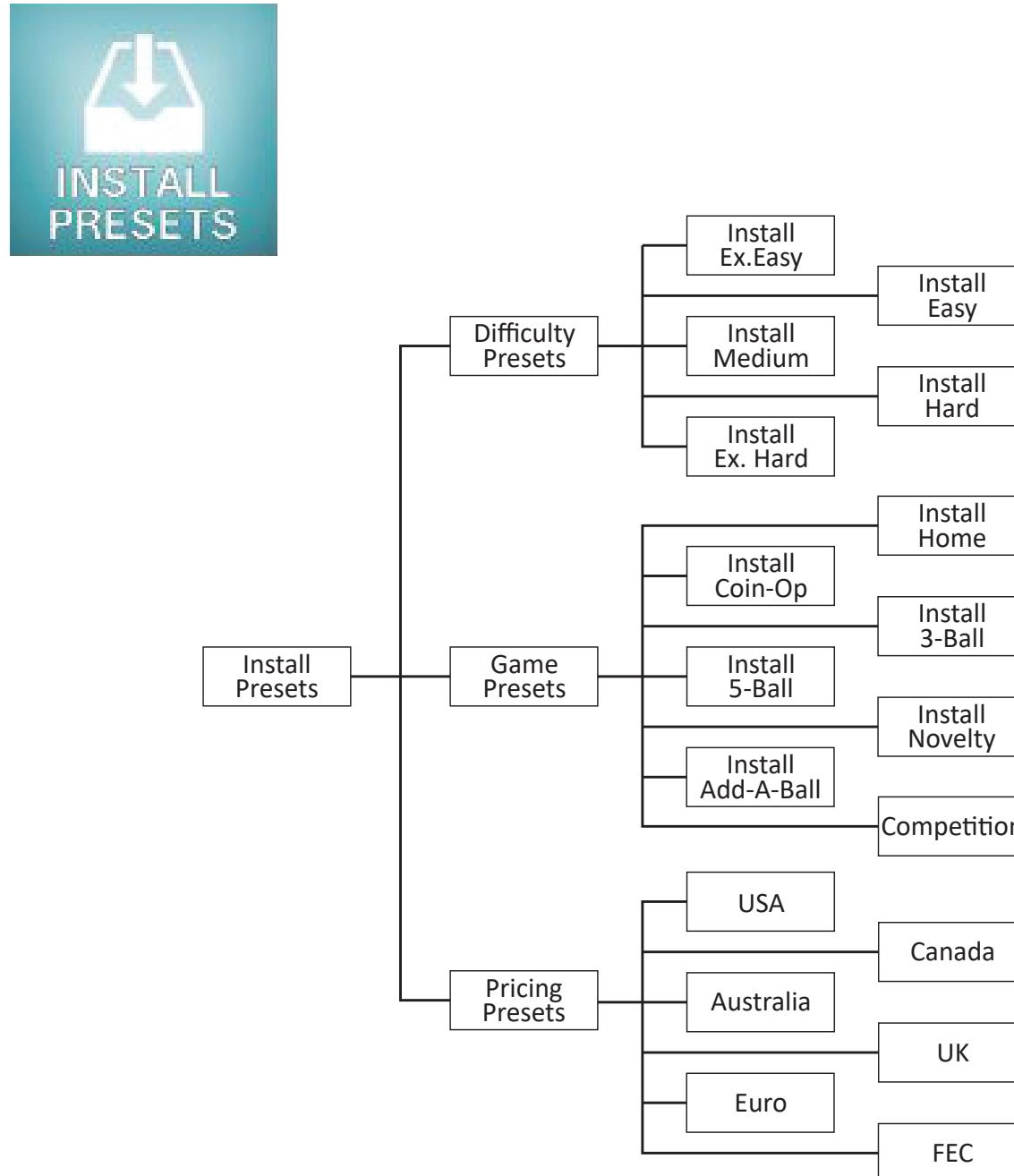


Figure B39. Install Presets menu tree.

B.6 Install Presets

The **Install Presets** menu (see figure B39 for an outline) allows the user to quickly make *quantum*, predefined changes to game play settings (as opposed to changing settings individually, in other sub-menus).

Difficulty Presets - change a predefined group of game/system settings to quickly make the game easier or more difficult to play. The difficulty level options are listed in figure B39.

Game Presets - change a predefined group of game/system settings to quickly configure the game to play in one of the standard modes listed in figure B39.

Pricing Presets - change a predefined group of pricing settings to quickly configure the game to accept coinage from one of the countries listed in figure B39.

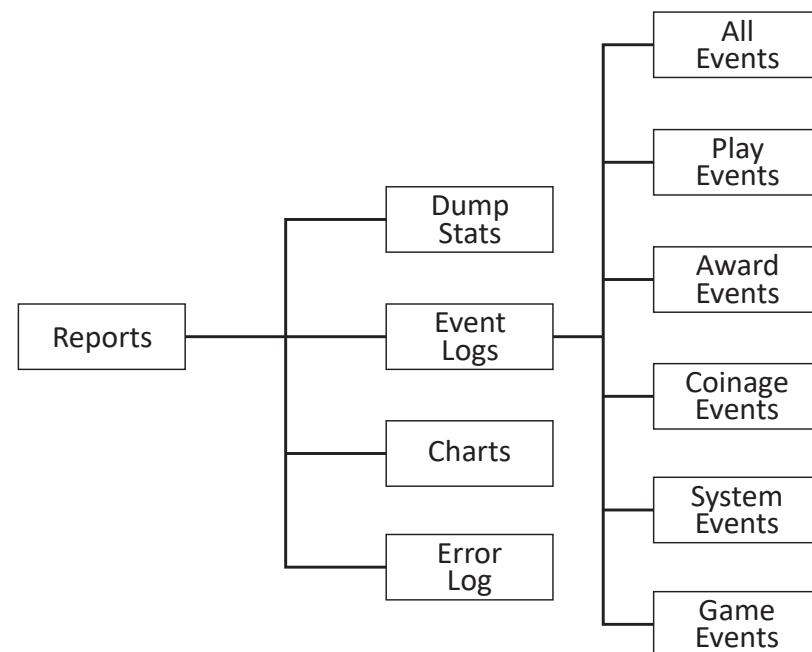


Figure B40. Reports menu tree.

B.7 Reports

The **Reports** menu (see figure B40 for an outline) allows the user to view logs and graphs of events of interest in the game including bad switch alerts, device errors, game power-ups, service credits, game statistics, awards, etc.

Dump Stats - dump game statistics to a USB drive for records or detailed, offline analysis.

Event Logs - view logs for various system events including when the power was cycled on the game, when the game was started, when the coin door was opened, when service credits were added, when game awards were earned, etc.

Charts - view charts of statistics such as games played per day, game times, game scores, etc.

Error Log - view the contents of the game's error log.

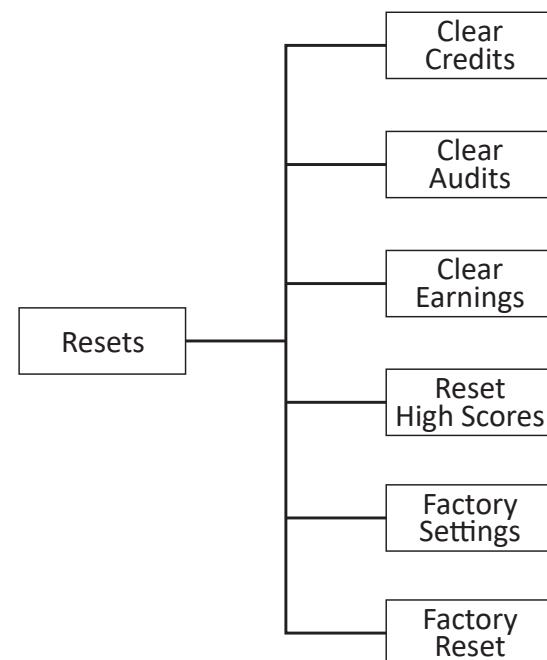


Figure B41. Resets menu tree.

B.8 Resets

The **Resets** menu (see figure B41 for an outline) allows the user to quickly clear game audits/earnings information and high scores from a single menu.

Clear Credits - clear credits from the game.

Clear Audits - reset audits data.

Clear Earnings - reset earnings data.

Reset High Scores - reset high scores to default values (see **High Score Settings** in Section B.3).

Factory Settings - reset all software-adjustable settings to the values they originally were given at the factory.

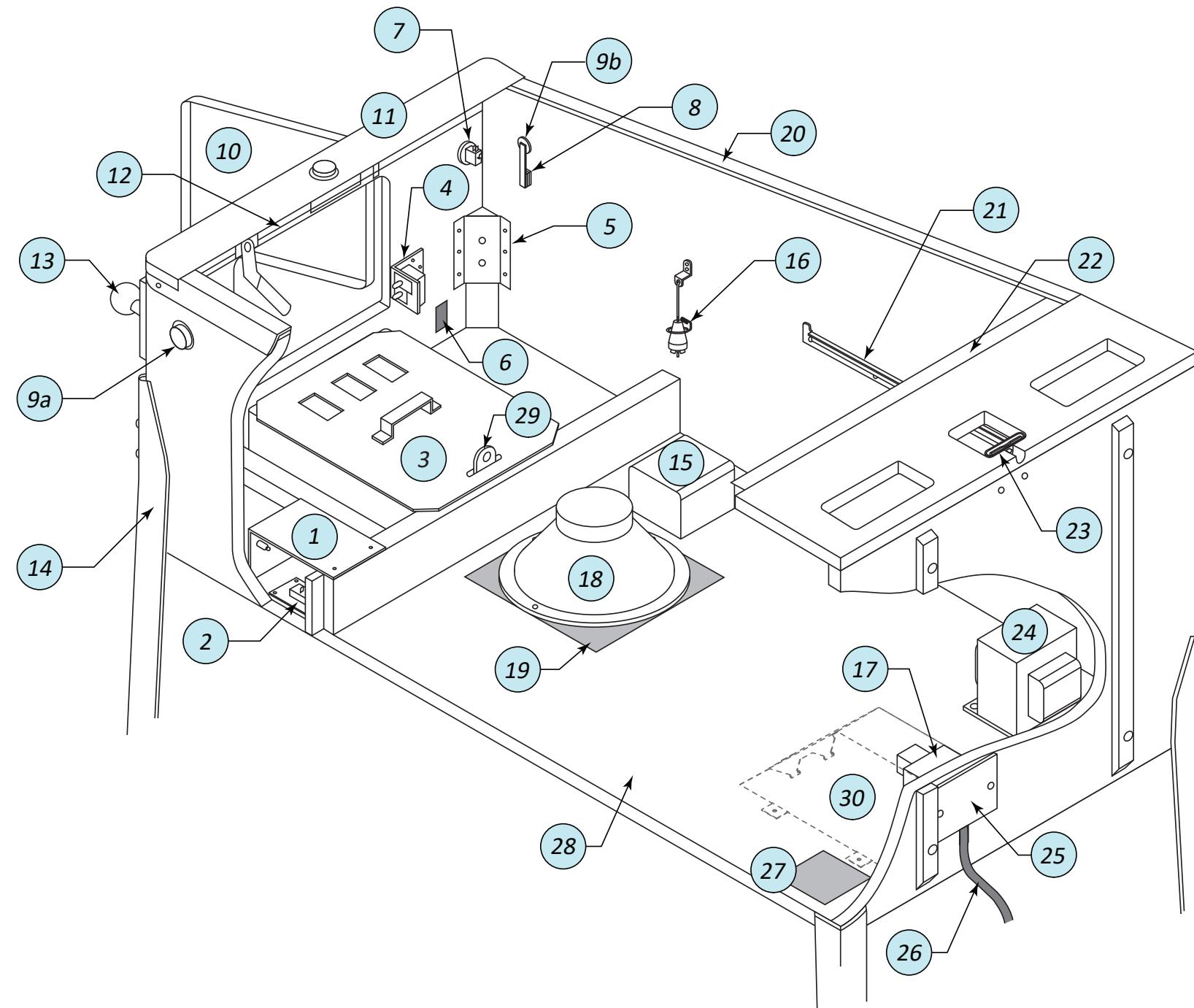
Factory Reset - reset factory settings (as above) plus reset audits and alarm counters.



Section C

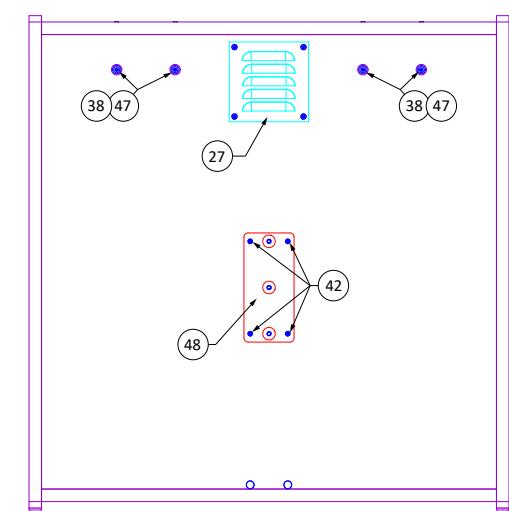
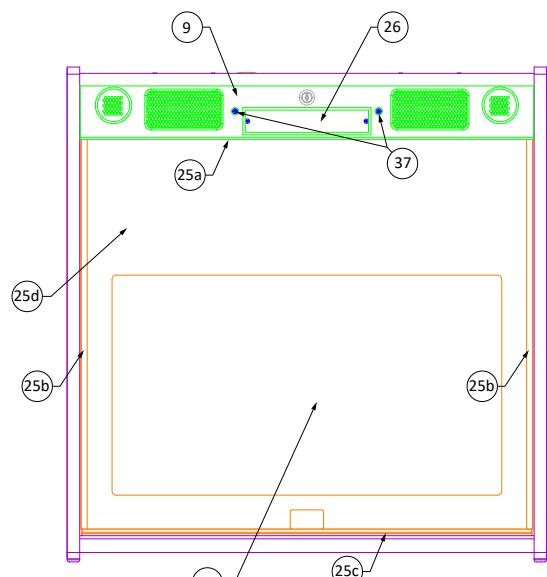
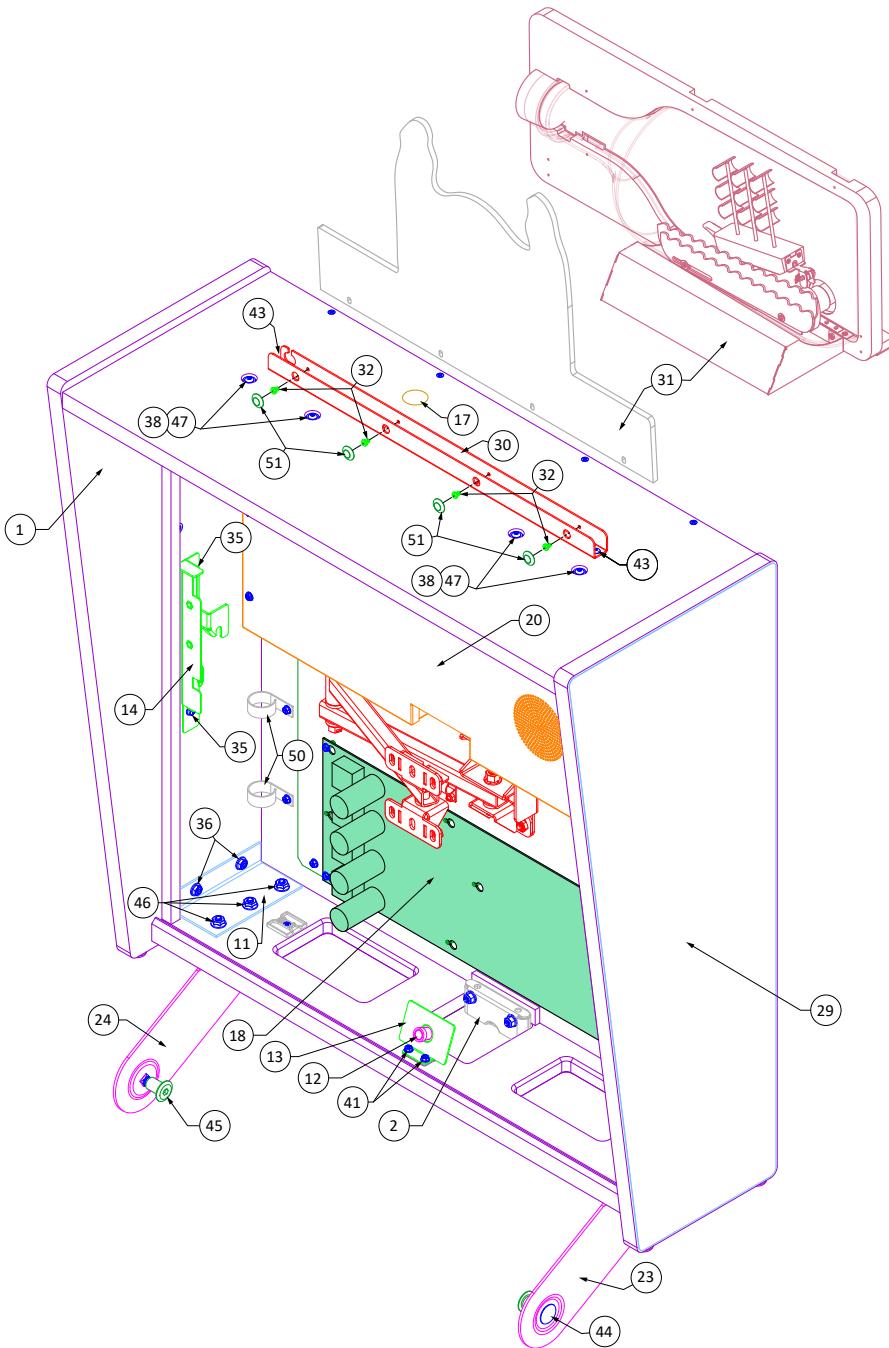
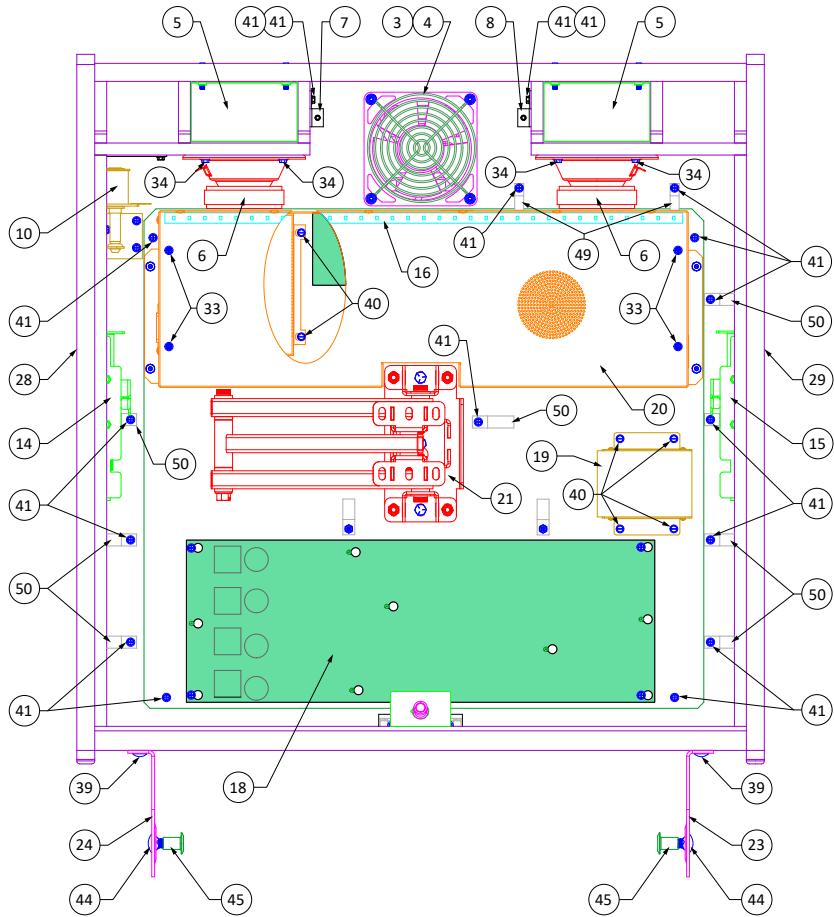
Game Parts Information





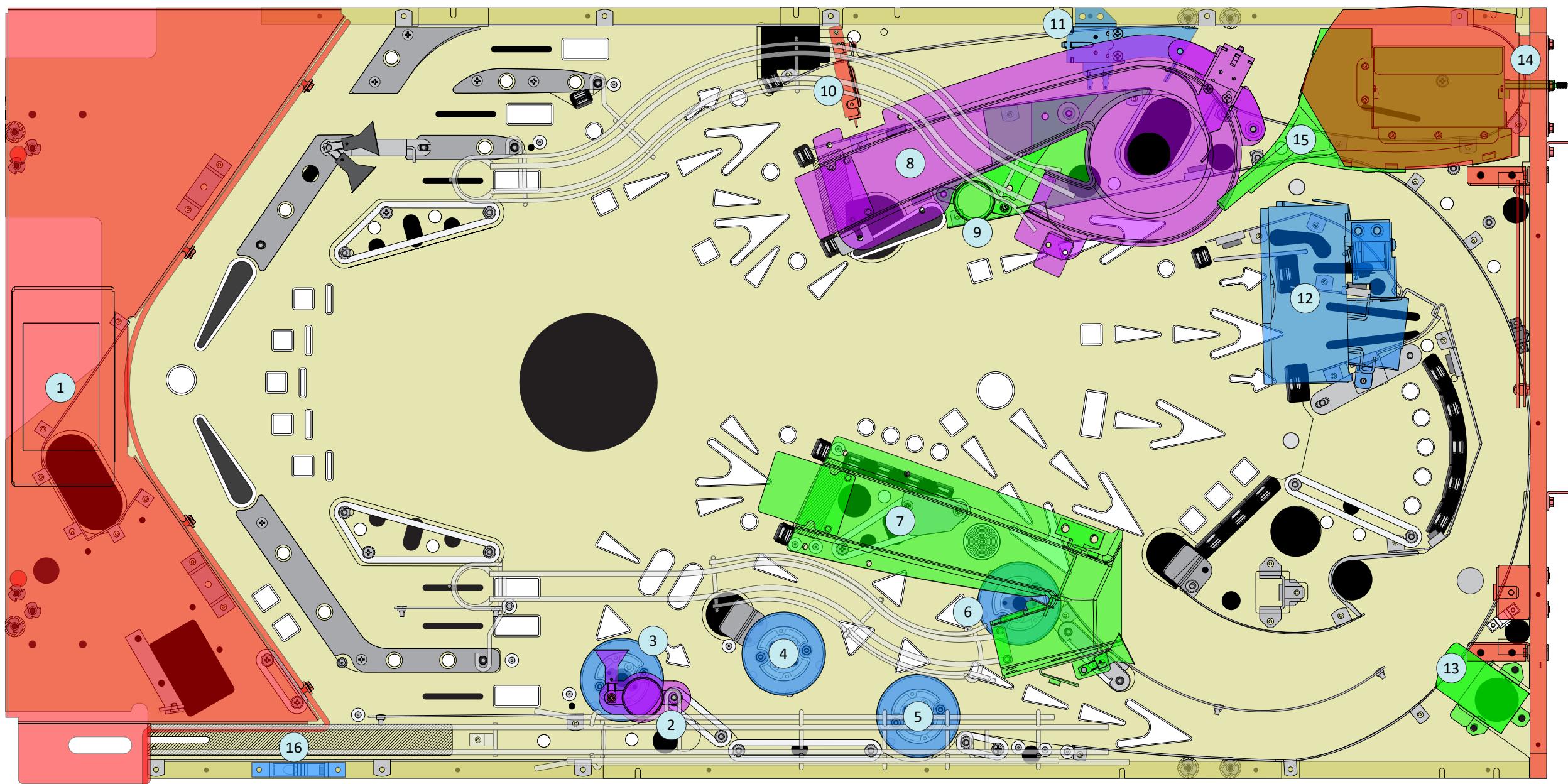
POTC Lower Cabinet Assemblies
50-005027-00 (Std), -01 (LE), -02 (CE)

| Item | Part Number | Description | Qty | Drawing | Item | Part Number | Description | Qty |
|------|-----------------|--|-----|---------|--------------------|---|--|-----|
| 1 | 51-005001-01 | Power Box Assy, Front Outlet | 1 | C-37 | 18 | 17-006004-00 | Subwoofer Speaker, 8", 8Ω, 40W | 1 |
| 2 | 18-007012-00 | On/Off Switch Assy | 1 | - | 19 | 10-000002-00 | Cabinet Speaker Grill, 8" | 1 |
| 3 | 30-000001-00 | Pinball Cashbox, Plastic | 1 | - | 20 | CE 42-007010-01 | Cabinet Side Rail, w/Button Guard, Right, Brass Bronze | 1 |
| | 10-000011-00 | Cashbox Cover, Universal | 1 | - | CE 42-007011-01 | Cabinet Side Rail, w/Button Guard, Left, Brass Bronze | 1 | |
| 4 | 51-000035-00 | Door & Interlock Switch Assy | 1 | - | LE 42-007003-11 | Cabinet Side Rail, Black Texture | 2 | |
| a) | 10-000089-00 | Door & Interlock Switch Brkt | 1 | - | Std 42-007003-01 | Cabinet Side Rail, Stainless | 2 | |
| b) | 18-003007-01 | Safety Interlock Switch, 2/16 | 1 | - | NS 30-008000-00 | Cabinet Side Glass Channel | 2 | |
| c) | 18-003008-00 | Coin Door Switch | 1 | - | NS 60-000002-01 | Widebody Playfield Invisiglass® | 1 | |
| 5 | 10-000006-00 | Cabinet Leg Mtg Brkt | 4 | - | Std 60-000002-00 | Widebody Playfield Glass | 1 | |
| 6 | 51-000064-00 | Cabinet Headphone Jack Assy (front of cabinet) | 1 | C-28 | 21 | 10-000033-01 | Playfield Support/Slide Brkt, Left | 1 |
| Std | 10-000197-01 | Cabinet Headphone Cover Plate | 1 | - | NS 10-000033-00 | Playfield Support/Slide Brkt, Right | 1 | |
| 7 | 18-007023-04 | Start Button Switch Assy, Recessed, Yellow | 1 | - | 22 | 30-100001-01 | Cabinet Rear Glass Channel, Widebody | 1 |
| 8 | 18-000005-01 | Flipper Leaf Switch, Double Contact (Left) | 1 | - | 23 | 42-005001-00 | Roto-Lock Latch | 1 |
| NS | 18-000005-01 | Flipper Leaf Switch, Double Contact (Right) | 1 | - | 24 | 16-005000-02 | Main Transformer, 2/16 | 1 |
| 9 | 18-007009-00 | Flipper Button Assy, Black | 2 | - | 25 | 10-000010-01 | Line Cord Cover Plate, No Cutout | 1 |
| a) | 30-000009-00 | Flipper Button, Black | 2 | - | 26 | 19-009000-00 | Line Power Cable, USA | 1 |
| b) | 91-000001-10 | Flipper Button PAL Nut | 2 | - | 27 | 10-000003-01 | Cabinet Vent Hole Grill, 3" | 2 |
| 10 | 40-000006-20 | Standard USA Coin Door Assy, 12V, No Headphone | 1 | E-12 | 28 | 05-000006-00 | Cabinet Wood Assy, Widebody | 1 |
| 11 | CE 51-000093-02 | POTC Lockdown Bar Assy, CE | 1 | C-36 | 29 | 10-000026-00 | Cashbox Lock Brkt | 1 |
| | LE 51-000093-01 | POTC Lockdown Bar Assy, LE | 1 | C-36 | 30 | 30-000125-00 | Line Filter Box Assy Cover | 1 |
| Std | 51-000093-00 | POTC Lockdown Bar Assy, Std | 1 | C-36 | NS 61-000008-01 | POTC Std/LE Cabinet Decal, Left Side | 1 | |
| 12 | 10-008001-00 | Lockdown Bar Receiver Assy, Notched | 1 | C-46 | NS CE 30-003016-11 | POTC CE Cabinet Rad-Cal, Left Side | 1 | |
| 13 | CE 51-000092-02 | POTC Ball Shooter Assy, CE | 1 | C-35 | NS 61-000008-00 | POTC Std/LE Cabinet Decal, Right Side | 1 | |
| | LE 51-000092-01 | POTC Ball Shooter Assy, LE | 1 | C-35 | NS CE 30-003016-12 | POTC CE Cabinet Rad-Cal, Right Side | 1 | |
| Std | 51-000092-00 | POTC Ball Shooter Assy, Std | 1 | C-35 | NS 61-003008-00 | POTC Std/LE Cabinet Decal, Front | 1 | |
| 14 | CE 10-000031-09 | Cabinet Leg Assy, 30.5", Brass Bronze | 4 | - | NS CE 30-003016-13 | POTC CE Cabinet Rad-Cal, Front | 1 | |
| | LE 10-000031-08 | Cabinet Leg Assy, 30.5", Black Texture | 4 | - | NS 30-000049-08 | Nylon Cable Clamp, Open, 1/2" | 8 | |
| Std | 10-000031-01 | Cabinet Leg Assy, 30.5", Chrome | 4 | - | NS 30-000049-12 | Nylon Cable Clamp, Open, 3/4" | 10 | |
| NS | 10-000133-00 | Cabinet Leg Brkt, Decal Protector | 4 | - | NS 30-000049-16 | Nylon Cable Clamp, Open, 1" | 2 | |
| 15 | 51-005027-01 | Shaker Motor Assy | 1 | C-39 | | | | |
| 16 | 51-000028-00 | Plumb Bob Tilt Assy | 1 | C-25 | | | | |
| 17 | 51-005023-00 | Line Filter Box Assy | 1 | C-38 | | | | |



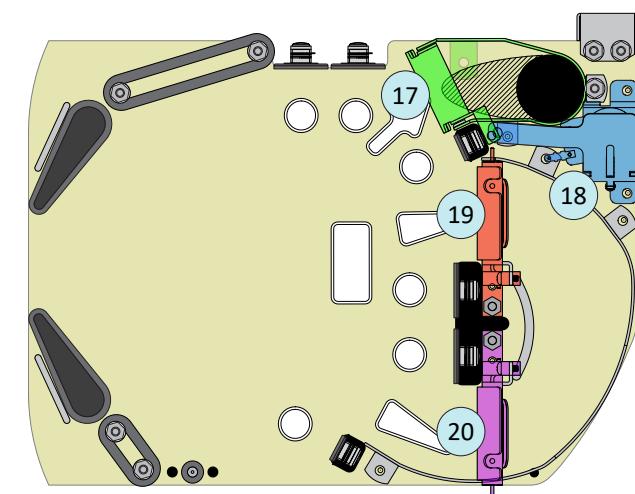
POTC Backbox Assemblies
50-005026-00 (Std), -01 (LE), -02 (CE)

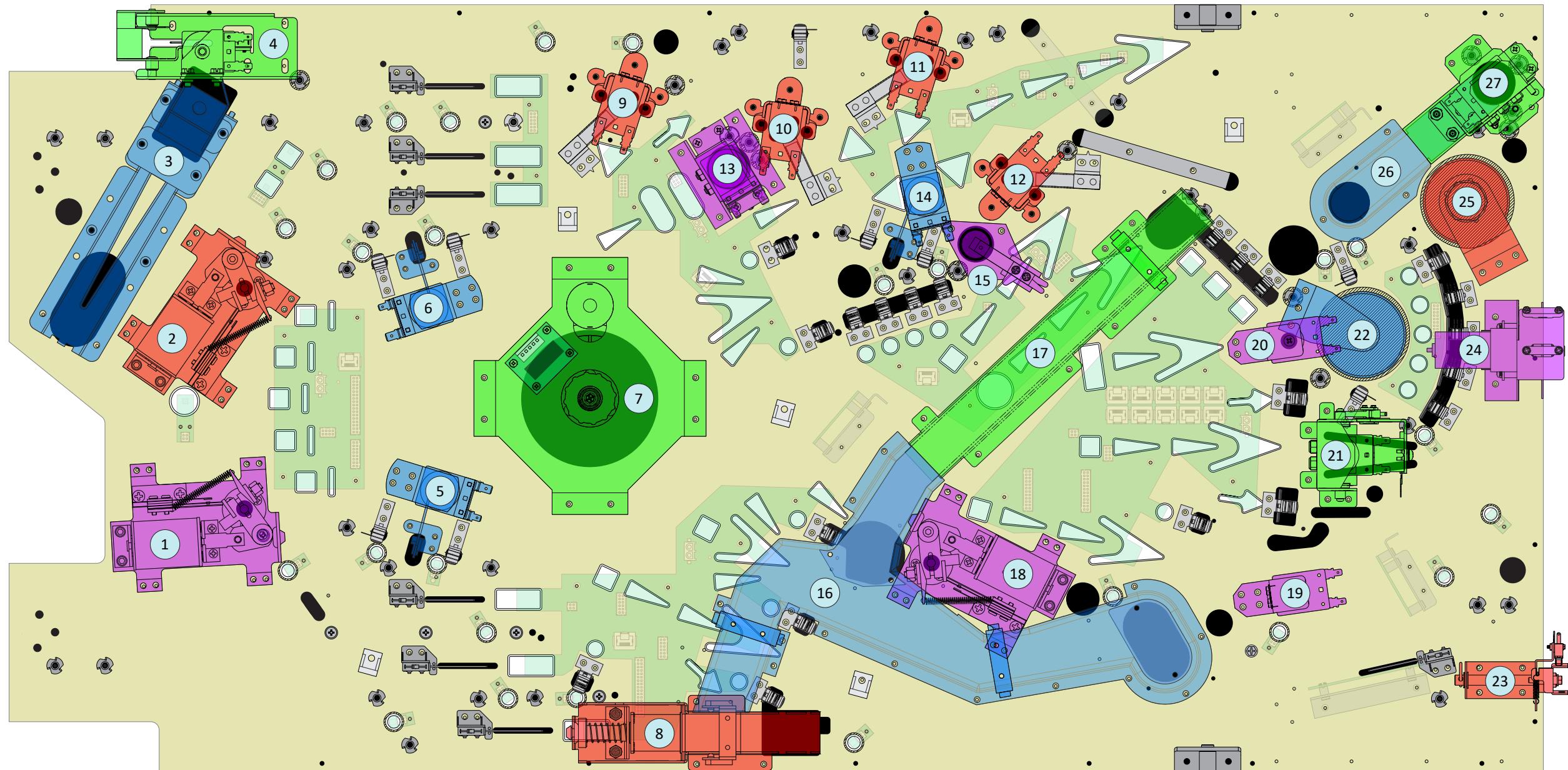
| Item | Part Number | Description | Qty | Dwg | Item | Part Number | Description | Qty | Dwg |
|------|------------------|--|-----|------|------|------------------|--|-----|------|
| 1 | 05-002003-00 | Backbox Wood Assy | 1 | - | 26 | CE 10-000281-10 | Jersey Jack Pinball Name Plate, CE | 1 | - |
| 2 | 42-005002-00 | Roto-Lock Receptacle | 1 | - | | LE 10-000281-00 | Jersey Jack Pinball Name Plate, LE | 1 | - |
| 3 | 51-006013-00 | Backbox Fan & Cable Assy | 1 | - | | Std 30-000114-01 | Jersey Jack Pinball Name Plate, Std | 1 | - |
| 4 | 10-000110-01 | Fan Guard, 4.69" | 1 | - | 27 | 10-000234-00 | Backbox Vent Hole Cover, Louvered | 1 | - |
| 5 | 10-000201-00 | Backbox Speaker Acoustic Plate | 2 | - | 28 | 61-006008-01 | POTC Std/LE Backbox Decal, Left Side | 1 | - |
| 6 | 17-006003-00 | 5.25" Midrange Speaker, 8Ω | 2 | - | | CE 30-003016-04 | POTC Backbox Rad-Cal, Left Side | 1 | - |
| 7 | 10-000207-00 | Backbox Speaker Bar Mtg Brkt, Left | 1 | - | 29 | 61-006008-00 | POTC Std/LE Backbox Decal, Right Side | 1 | - |
| 8 | 10-000207-01 | Backbox Speaker Bar Mtg Brkt, Right | 1 | - | | CE 30-003016-05 | POTC Backbox Rad-Cal, Right Side | 1 | - |
| 9 | 51-005053-00 | Backbox Speaker Bar Assy, Wood | 1 | C-43 | 30 | LE 51-006010-00 | Backbox Topper Mtg Brkt & Cable Assy | 1 | - |
| 10 | 51-000032-01 | Knocker Assy, Vertical | 1 | C-27 | 31 | LE 30-000099-00 | POTC LE Backbox Topper Plastic, Lasered | 1 | - |
| 11 | 10-000034-00 | Backbox Inner Corner L Brkt | 2 | - | | CE 51-005052-00 | POTC CE Ship In A Bottle Topper Assy | 1 | C-70 |
| 12 | 51-005041-00 | USB Camera Assy | 1 | C-41 | 32 | LE 80-000008-05 | 8-32 x 5/16" PPH MS | 4 | - |
| 13 | 30-000094-00 | USB Camera Cover | 1 | - | 33 | 80-002008-04 | 8-32 x 1/4" HWH Phillips MS, Serrated | 4 | - |
| 14 | 10-008003-00 | 27" LCD Lock/Latch Brkt Assy, Left | 1 | C-44 | 34 | 80-002008-08 | 8-32 x 1/2" HWH Phillips MS, Serrated | 8 | - |
| 15 | 10-008003-01 | 27" LCD Lock/Latch Brkt Assy, Right | 1 | C-44 | 35 | 80-002010-06 | 10-32 x 3/8" HWH Phillips MS, Serrated | 4 | - |
| 16 | 51-005042-00 | Backbox LED Strip Assy, w/Cable | 1 | - | 36 | 80-002025-08 | 1/4-20 x 1/2" HWH Phillips MS, Serrated | 4 | - |
| 17 | Std 30-000093-01 | Button Plug, 1", Black | 1 | - | 37 | 80-008108-16 | 8-32 x 1" TP Torx MS, Black | 2 | - |
| 18 | 51-005045-01 | Backbox Mount PCB Assy, 11/17 | 1 | C-48 | 38 | 80-008110-16 | 10-32 x 1" TP Torx MS, Black | 8 | - |
| 19 | 51-005044-02 | Backbox Mount Solid State Drive Assy, 60GB | 1 | C-41 | 39 | 81-005125-20 | 1/4-20 x 1-1/4" Carriage Bolt, Black | 6 | - |
| 20 | 10-000236-01 | Backbox PCBs EMI Shield Lid | 1 | - | 40 | 82-002006-08 | #6 x 1/2" HWH Phillips SMS | 6 | - |
| 21 | 51-005043-00 | 27" LCD Pivot/Swing Assy | 1 | C-42 | 41 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 20 | - |
| 22 | 51-005032-10 | 27" LCD Monitor Assy, Backbox PCBs | 1 | C-40 | 42 | 82-006106-08 | #6 x 1/2" PFH SMS, Black | 4 | - |
| 23 | CE 42-007001-22 | Backbox Right Mtg Hinge, Brass Bronze | 1 | - | 43 | LE 82-008108-10 | #8 x 5/8" TP T-20 Torx SMS, Black | 2 | - |
| | 42-007001-00 | Backbox Right Mtg Hinge, Black | 1 | - | 44 | 85-003816-12 | 3/8-16 x 3/4" Hinge Bolt, Short Neck, Black | 2 | - |
| 24 | CE 42-007001-23 | Backbox Left Mtg Hinge, Brass Bronze | 1 | - | 45 | 85-003816-00 | 3/8-16 x 3/4" x 1/2" SH T-Nut Pivot Bushing, Black | 2 | - |
| | 42-007001-01 | Backbox Left Mtg Hinge, Black | 1 | - | 46 | 91-002025-00 | 1/4-20 Flange Nut | 6 | - |
| 25 | 51-005047-00 | POTC Printed Backglass Assy | 1 | - | 47 | 92-000110-00 | #10 Flat Washer, Black | 8 | - |
| CE | 51-005047-01 | POTC Printed Backglass Assy, CE | 1 | - | 48 | 10-000206-09 | 27" LCD Pivot Backbox Face Plate | 1 | - |
| a) | 30-008002-00 | Backglass Top Plastic Channel, 26-15/16" | 1 | - | 49 | 30-000049-08 | Nylon Cable Clamp, Open, 1/2" | 2 | - |
| b) | 30-008002-01 | Backglass Side Plastic Channel | 2 | - | 50 | 30-000049-16 | Nylon Cable Clamp, Open, 1" | 7 | - |
| c) | 30-008004-00 | Backglass Lift Channel | 1 | - | 51 | LE 30-000095-00 | Round Plug, w/Flange, Black | 4 | - |
| d) | 60-000008-00 | POTC Printed Backglass (-00) | 1 | - | | | | | |
| CE | 60-000008-01 | POTC Printed Backglass, CE (-01) | 1 | - | | | | | |



Above-Playfield Assemblies

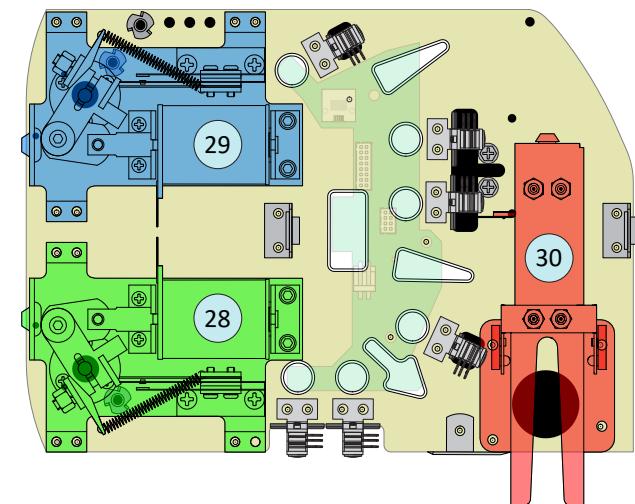
| Item | Part Number | Assembly Name | Game Function | Drawing | |
|-------|---------------|---|--------------------------------------|--|------|
| 1 | 52-000077-00 | POTC Bottom Arch Assy | Playfield Bottom Arch | C-68 | |
| 2 | 52-000080-00 | POTC RGB Beacon Flasher & Spotlight Assy | Beacon Flasher & Spotlight | C-69 | |
| 3 | 51-000106-999 | Pop Bumper Top Assy, White/White/White | Lower Pop Bumper | C-16 | |
| | 11-005004-01 | Pop Bumper Ring & Rod Assy | | | |
| 4 | 51-000106-999 | Pop Bumper Top Assy, White/White/White | Lower Middle Pop Bumper | C-16 | |
| | 11-005004-01 | Pop Bumper Ring & Rod Assy | | | |
| CE/LE | 51-000091-00 | POTC Pirate Spinning Pop Bumper Assy | Spinning Pirate PB Sculpture | C-32 | |
| 5 | 51-000106-999 | Pop Bumper Top Assy, White/White/White | Upper Middle Pop Bumper | C-16 | |
| | 11-005004-01 | Pop Bumper Ring & Rod Assy | | | |
| 6 | 51-000106-999 | Pop Bumper Top Assy, White/White/White | Upper Pop Bumper | C-16 | |
| | 11-005004-01 | Pop Bumper Ring & Rod Assy | | | |
| CE/LE | 51-000091-10 | POTC Guns/Coins Spinning Pop Bumper Assy | Spinning Barrel PB Sculpture | C-33 | |
| 7 | 52-000076-00 | POTC Mini PF Access Ramp Assy | Ramp to Black Pearl Mini PF | C-64 | |
| 8 | 52-000075-00 | POTC Maelstrom Ramp Assy | Maelstrom Ramp | C-62 | |
| 9 | 52-000080-10 | POTC RGB Beacon Flasher & PF Plastic Assy | Beacon Flasher | C-69 | |
| 10 | 51-000089-00 | Opto Spinner Assy, Lighted, Right | Devil's Triangle Spinner | C-34 | |
| 11 | 51-005051-00 | POTC Left Turnaround Loop Diverter Assy | Devil's Triangle Ball Diverter | C-50 | |
| 12 | 52-000074-00 | POTC Treasure Chest 3-Ball Lock Assy | Treasure Chest; 3-Ball Physical Lock | C-60 | |
| 13 | 52-000084-00 | POTC VUK Chute & Gate Assy | VUK Access to Black Pearl Mini PF | C-47 | |
| 14 | CE/LE | 52-000063-00 | POTC Back Panel Assy, LE/CE | Starfield, Target Ship Deck, PF Backdrop | C-52 |
| | Std | 52-000063-01 | POTC Back Panel Assy, Std | Target Ship Deck, PF Backdrop | C-52 |
| 15 | 52-000073-01 | POTC Target Ship Sculpture Assy | Target Ship Sculpture | C-59 | |
| 16 | 51-000107-00 | Playfield Bubble Level Assy | Playfield Pitch Indicator | - | |
| a) | 30-000087-00 | Playfield Bubble Level Brkt | | | |
| b) | 30-000087-01 | Playfield Bubble Level Vial | | | |
| 17 | 52-000072-10 | POTC Cannon Load Flatrail & Gate Assy | Black Pearl Cannon Ball Gate | C-57 | |
| 18 | 52-000072-00 | POTC Cannon Load Latch Coil Assy | Black Pearl Cannon Ball Gate Latch | C-57 | |
| 19 | 51-000089-01 | Opto Spinner Assy, Lighted, Left | Black Pearl Left Spinner | C-34 | |
| 20 | 51-000089-00 | Opto Spinner Assy, Lighted, Right | Black Pearl Right Spinner | C-34 | |

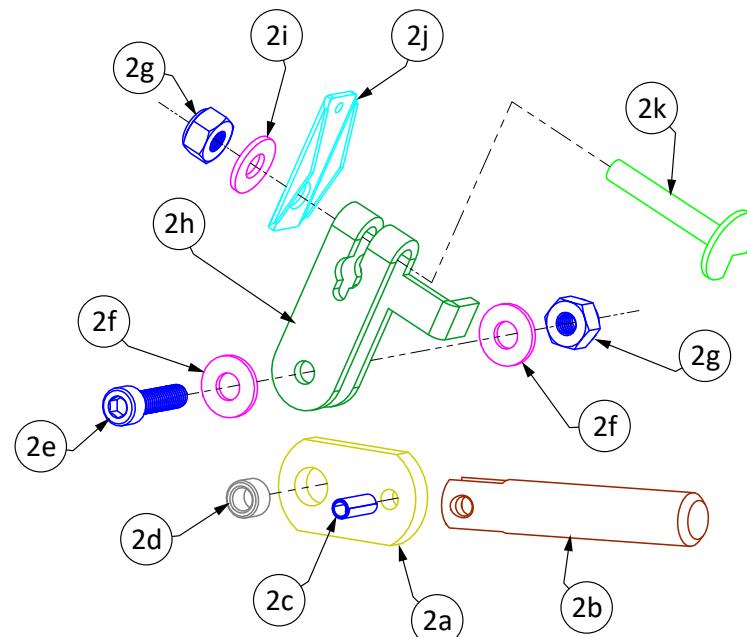




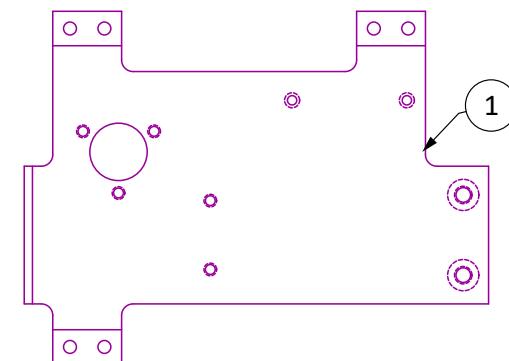
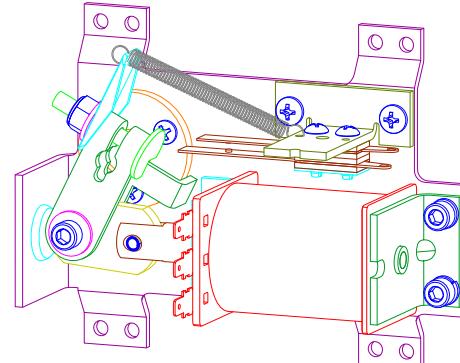
Under-Playfield Assemblies

| Item | Part Number | Assembly Name | Game Function | Drawing |
|------|---------------|--|---------------------------------|---------|
| 1 | 52-000132-00 | Left Flipper Assy, FL-15411 | Left Flipper | C-12 |
| 2 | 52-000131-00 | Right Flipper Assy, FL-15411 | Right Flipper | C-10 |
| 3 | 51-000021-00 | 5-Ball Trough Assy | Ball Trough, VUK | C-20 |
| 4 | 51-000026-00 | Auto-Launch Assy | Ball Auto-Launch | C-22 |
| 5 | 51-000003-00 | Slingshot Assy, 23-800 | Left Slingshot | C-14 |
| 6 | 51-000003-00 | Slingshot Assy, 23-800 | Right Slingshot | C-14 |
| 7 | 52-000071-10 | POTC Single Disc Spinning Map Assy | Spinning Map | C-56 |
| 8 | 51-000083-01 | Ball Scoop Assy, Right Side Entrance | The Depths Scoop | C-29 |
| 9 | 51-000004-01 | Pop Bumper Bottom Assy, 26-1200 | Lower Pop Bumper | C-17 |
| 10 | 51-000004-01 | Pop Bumper Bottom Assy, 26-1200 | Lower Middle Pop Bumper | C-17 |
| 11 | 51-000004-01 | Pop Bumper Bottom Assy, 26-1200 | Upper Middle Pop Bumper | C-17 |
| 12 | 51-000004-01 | Pop Bumper Bottom Assy, 26-1200 | Upper Pop Bumper | C-17 |
| 13 | 51-000009-00 | Vertical Up-Kicker Assy | Tortuga VUK | C-15 |
| 14 | 51-000003-00 | Slingshot Assy, 23-800 | Upper Slingshot | C-14 |
| 15 | 18-007003-00 | Rollover Button Switch Assy | Bumper Rollover | C-25 |
| 16 | 52-000078-00 | POTC Plastic Primary Subway Assy | Main Subway | C-66 |
| 17 | 52-000078-10 | POTC Steel Subway Assy | MAP Subway Extension | C-67 |
| 18 | 52-000132-00 | Left Flipper Assy, FL-15411 | Upper Left Flipper | C-12 |
| 19 | 51-000030-10 | Disappearing Post Assy, 7/16" Diam | Left Orbit Up Post | C-26 |
| 20 | 51-000030-10 | Disappearing Post Assy, 7/16" Diam | Chapter Select Up Post | C-26 |
| 21 | 51-000088-00 | Fork Lifter Assy | Chest 3-Ball Lock Forks | C-30 |
| 22 | 51-000024-01 | Playfield Magnet Assy, Fixed Core | Chapter Select Buried Magnet | C-24 |
| 23 | 52-000073-00 | POTC Target Ship Assy | Dauntless Ship Mounting | C-58 |
| | 52-000073-10 | POTC Target Ship Sculpture Assy | Dauntless Ship Sculpture/Target | C-59 |
| 24 | 52-000068-00 | POTC Black Pearl PF Rocker Assy | Black Pearl Mini PF Control | C-54 |
| 25 | 51-000024-00 | Playfield Magnet Assy, Adjustable Core | Orbit Magnet | C-24 |
| 26 | 31-000011-00 | POTC Plastic VUK Subway | Black Pearl Access VUK Subway | - |
| 27 | 51-000012-00 | VUK/Steel Trough Assy, Right Mount | Black Pearl Access VUK | C-18 |
| 28 | 52-000102-32R | Left Flipper Assy, Mod -LR, FL-11722, 3-Way, LR | Black Pearl Left Flipper | C-12 |
| 29 | 52-000101-33L | Right Flipper Assy, Mod -LL, FL-11722, 3-Way, LL | Black Pearl Right Flipper | C-10 |
| 30 | 52-000069-00 | POTC Black Pearl PF Cannon Assy | Black Pearl Cannon | C-51 |

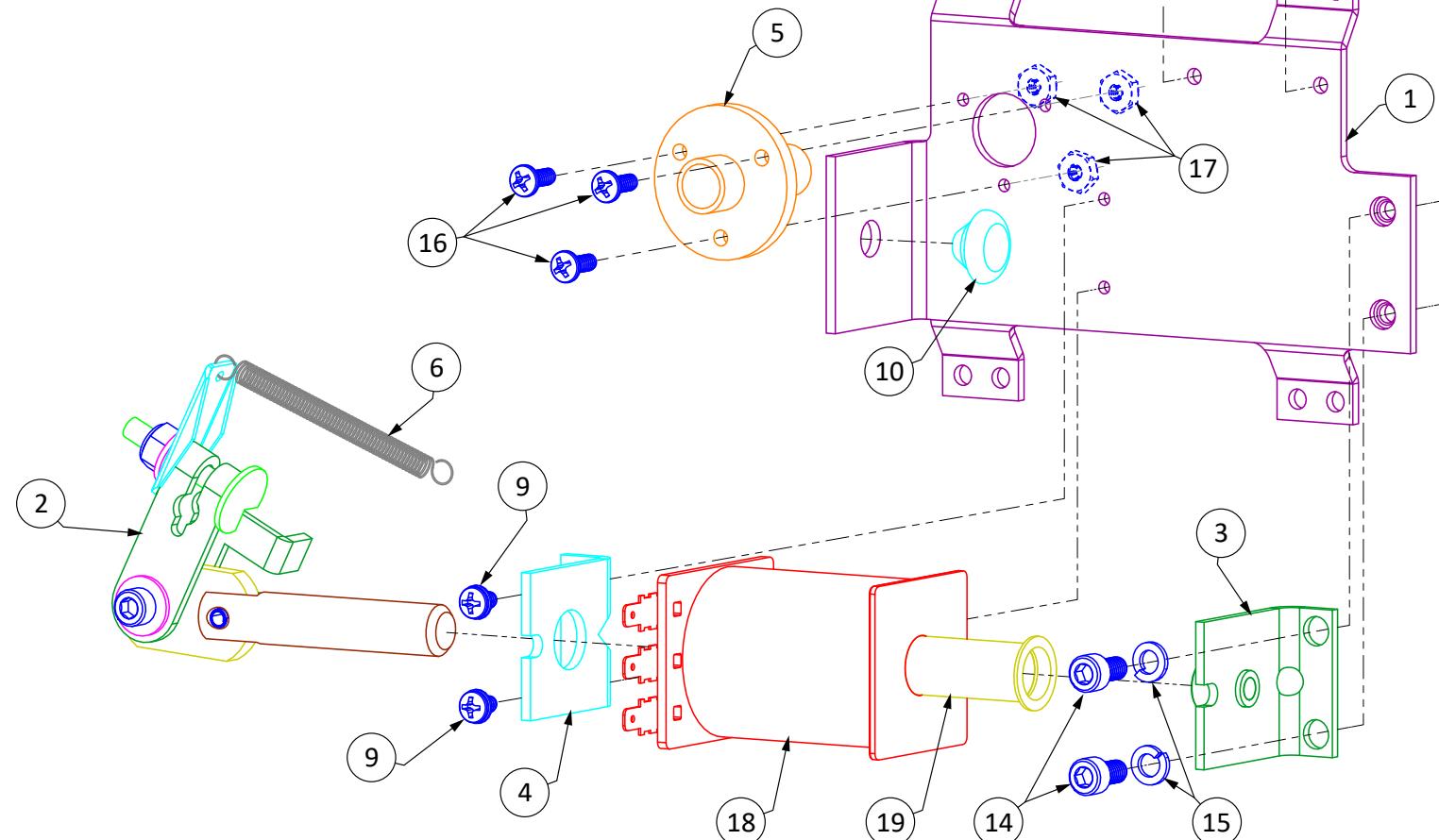




Item 2 detail

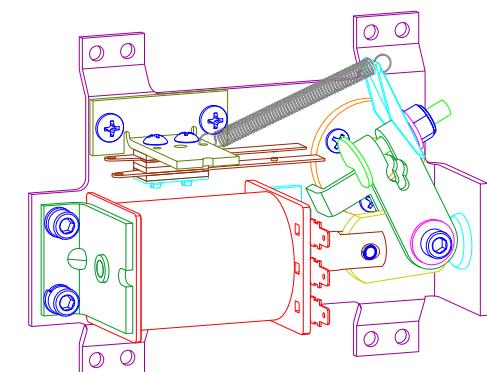
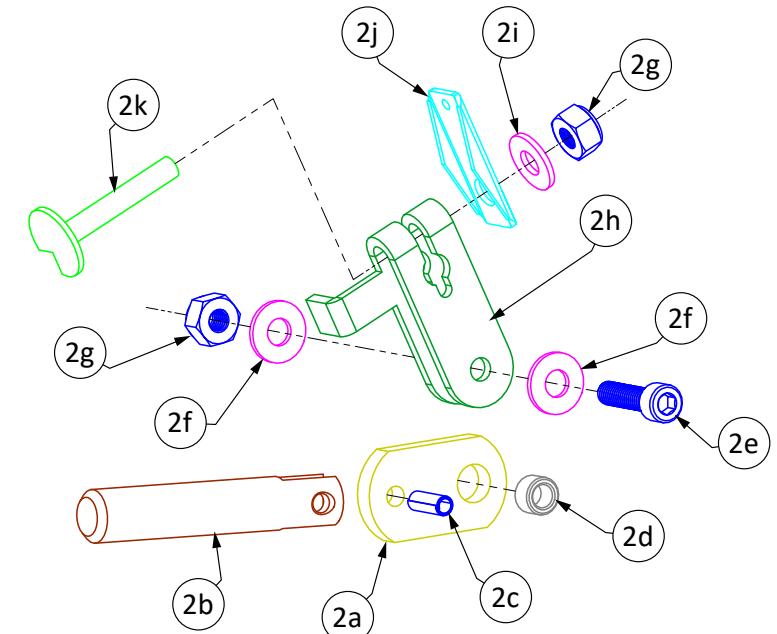
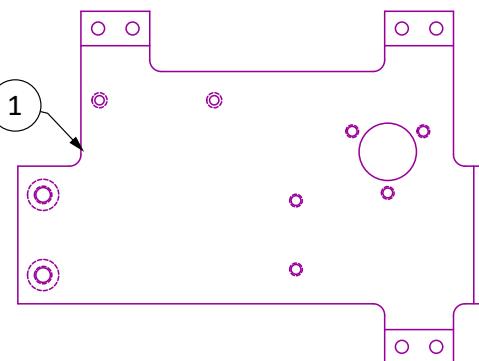
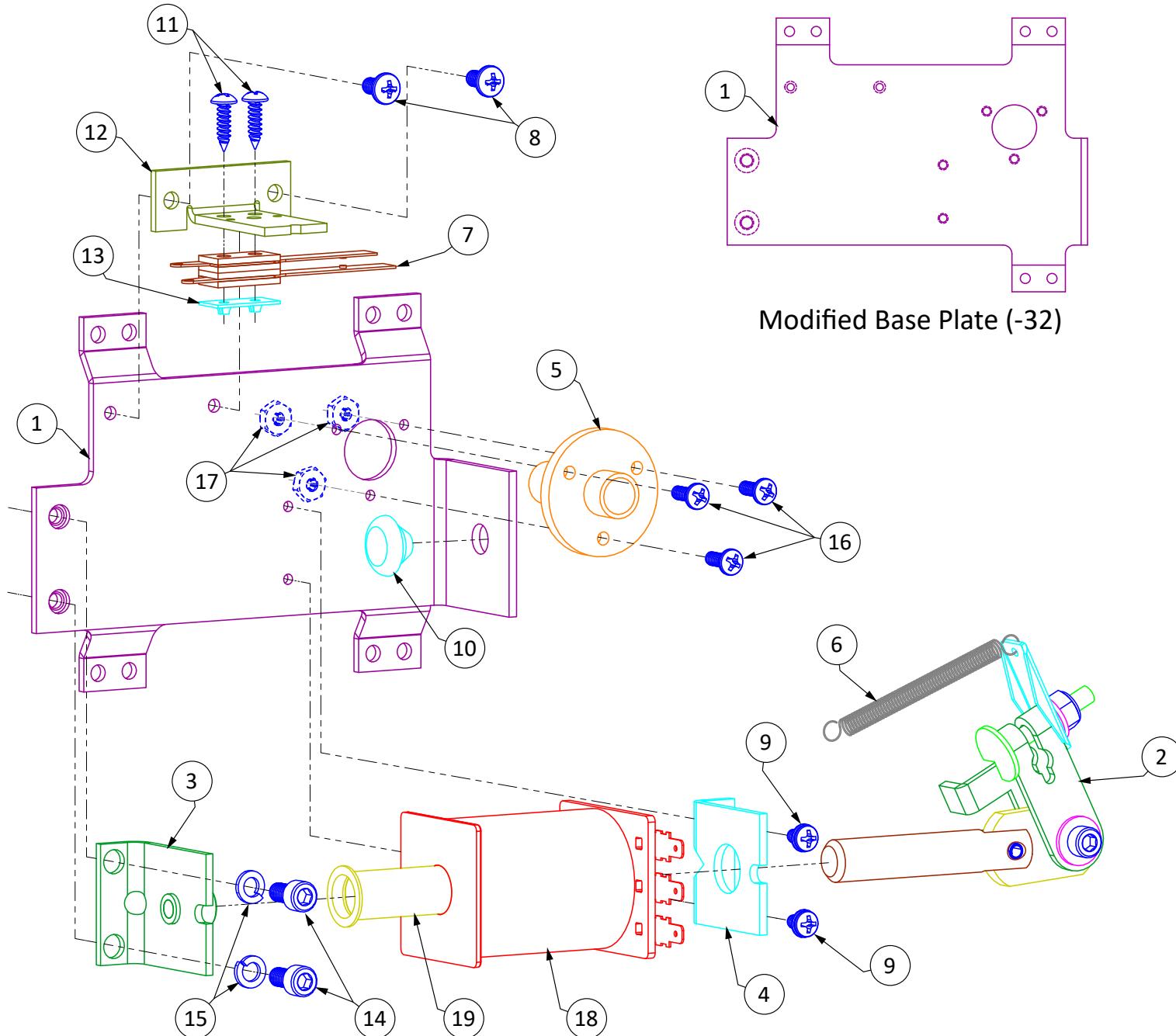


Modified Base Plate (-33)



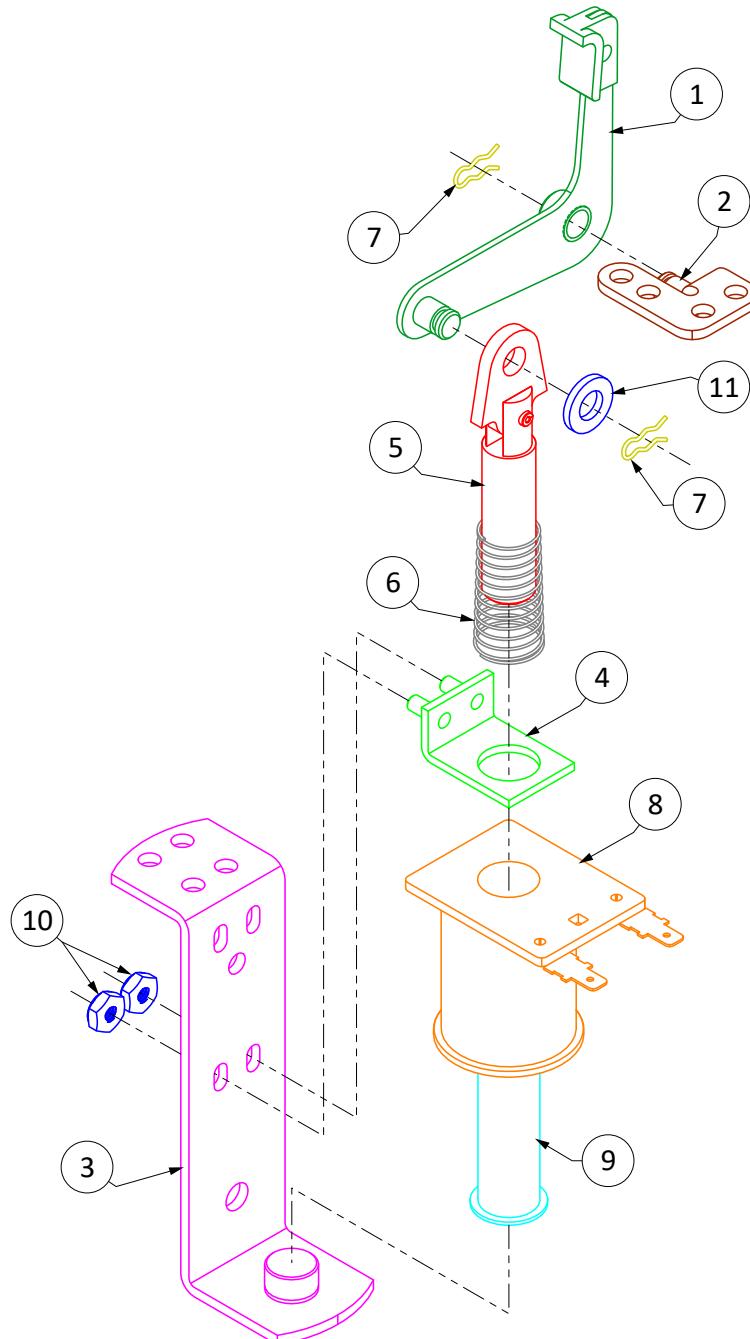
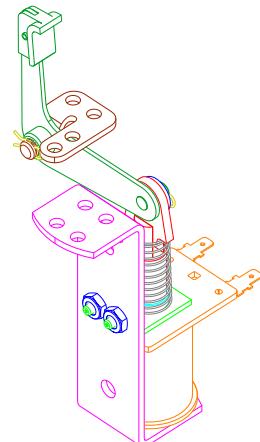
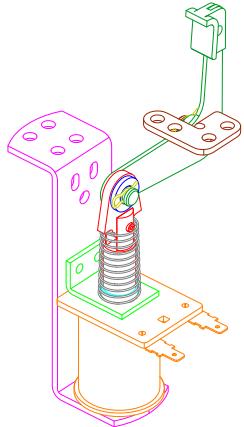
Right Flipper Assembly; 51-000001-00
Right Flipper Assembly, Mod -LL, 3-Way; 51-000001-33

| Item | Part Number | Description | Qty | Item | Part Number | Description | Qty |
|------|--------------|---|-----|------|--------------|--|-----|
| 1 | 10-005001-00 | Flipper Base Plate, Right (-00, Right) | 1 | 8 | 80-000008-05 | 8-32 x 5/16" PPH MS | 2 |
| or | 10-005001-13 | Flipper Base Plate, Right, Mod-LL (-33, Black Pearl Right) | 1 | 9 | 80-001006-04 | 6-32 x 1/4" PPH MS, SEMS | 2 |
| 2 | 51-005018-00 | Flipper Crank & Link Assy, Right | 1 | 10 | 25-009001-00 | Rubber Bumper Plug, Black | 1 |
| abc | 11-005000-00 | Flipper Coil Plunger & Link Assy | 1 | 11 | 82-000006-08 | #6 x 1/2" PPH SMS | 2 |
| a) | 30-009003-00 | Flipper Link | 1 | 12 | 10-000018-00 | End Of Stroke Switch Brkt | 1 |
| b) | 11-000003-00 | Flipper Plunger | 1 | 13 | 91-006000-00 | Tinnerman Nut, Leaf Switch Stack | 1 |
| c) | 94-004002-00 | 5/32" x 7/16" Roll Pin | 1 | 14 | 90-004010-06 | 10-32 x 3/8" SH CS | 2 |
| d) | 94-003001-00 | Flipper Crank & Link Bushing | 1 | 15 | 92-001010-00 | #10 Split Lock Washer | 2 |
| e) | 90-004010-14 | 10-32 x 7/8" SH CS | 1 | 16 | 80-000006-06 | 6-32 x 3/8" PPH MS | 3 |
| f) | 92-000010-00 | #10 Flat Washer, 0.226" ID, 0.5" OD, 0.05" TH | 2 | 17 | 91-000006-00 | 6-32 Nylon Stop Nut | 3 |
| g) | 91-000010-00 | 10-32 Nylon Stop Nut | 2 | | | | |
| h) | 10-000019-00 | Flipper Crank, Right | 1 | | | <i>for 52-000131-00, Right Flipper Assy, FL-15411, add:</i> | |
| i) | 92-000010-02 | #10 Flat Washer, 0.207" ID, 0.625" OD, 0.0975" TH | 1 | 18 | 23-002003-00 | FL-15411 Flipper Coil | 1 |
| j) | 10-000020-00 | Flipper Return Spring Brkt | 1 | 19 | 30-000014-35 | 2-3/16" Coil Tubing, Straight | 1 |
| k) | 90-000001-00 | Locking Stud Bolt | 1 | | | | |
| 3 | 10-007001-00 | Flipper Coil Stop Brkt | 1 | | | <i>for 52-000101-33L, Right Flipper Assy, Mod -LL, FL-11722, 3-Way, LL, add:</i> | |
| 4 | 10-007002-01 | Flipper Coil Centering Brkt, 1-Way (-00, Right) | 1 | 18 | 23-002000-00 | FL-11722 Flipper Coil | 1 |
| or | 10-007002-00 | Flipper Coil Centering Brkt, 3-Way (-33, Black Pearl Right) | 1 | 19 | 30-000014-35 | 2-3/16" Coil Tubing, Straight | 1 |
| 5 | 30-009002-00 | Flipper Bushing | 1 | | | (Note: orient the coil lugs to the left side of the assembly) | |
| 6 | 13-007001-00 | Flipper Return Spring | 1 | | | | |
| 7 | 18-000001-00 | End Of Stroke Leaf Switch | 1 | | | | |



Left Flipper Assembly; 51-000002-00
Left Flipper Assembly, Mod -LR, 3-Way; 51-000002-32

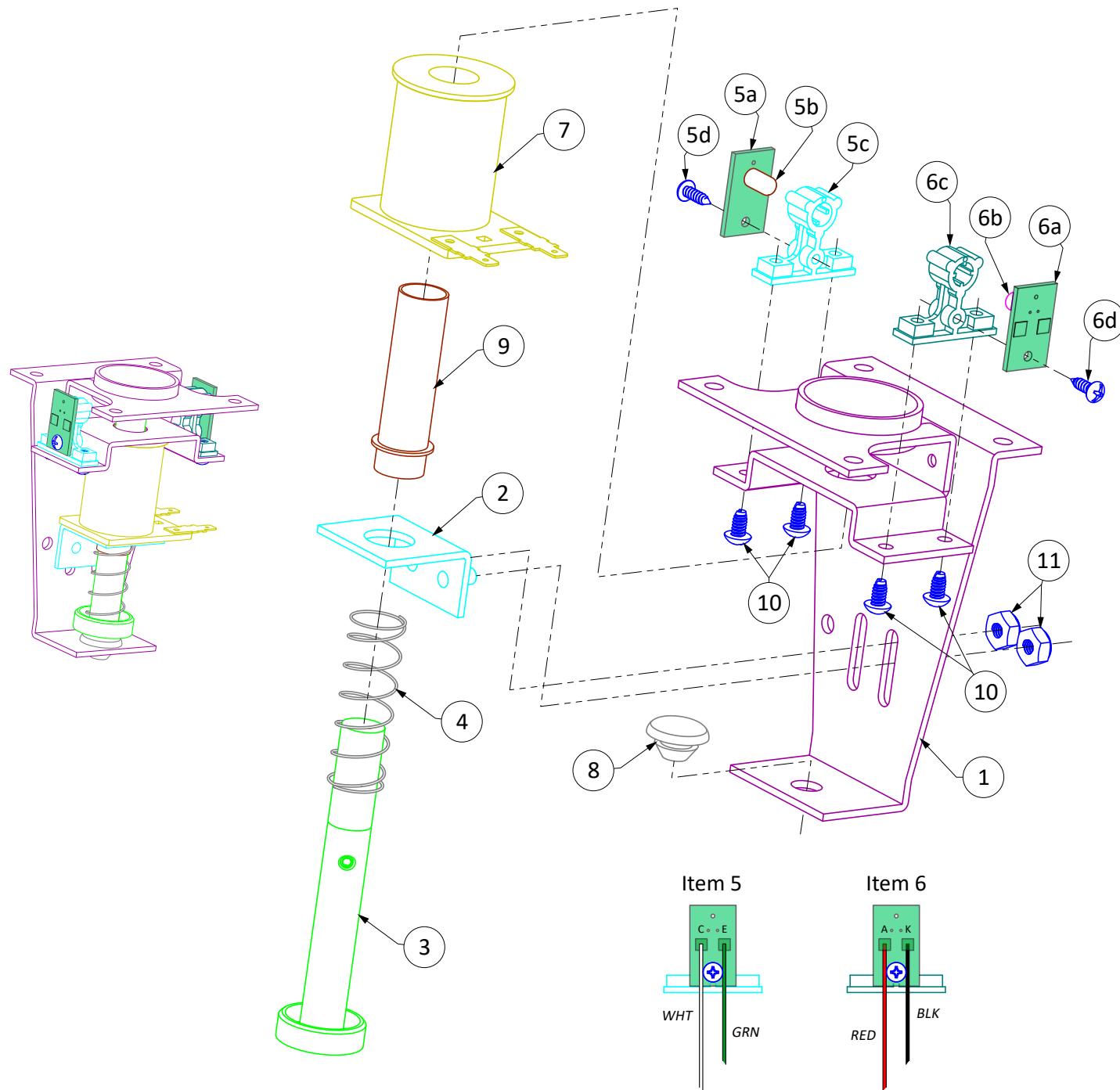
| Item | Part Number | Description | Qty | Item | Part Number | Description | Qty |
|------|--------------|--|-----|------|--------------|---|-----|
| 1 | 10-005002-00 | Flipper Base Plate, Left (-00, Left, Upper Left) | 1 | 8 | 80-000008-05 | 8-32 x 5/16" PPH MS | 2 |
| or | 10-005002-12 | Flipper Base Plate, Left, Mod-LR (-32, Black Pearl Left) | 1 | 9 | 80-001006-04 | 6-32 x 1/4" PPH MS, SEMS | 2 |
| 2 | 51-005018-01 | Flipper Crank & Link Assy, Left | 1 | 10 | 25-009001-00 | Rubber Bumper Plug, Black | 1 |
| abc) | 11-005000-00 | Flipper Coil Plunger & Link Assy | 1 | 11 | 82-000006-08 | #6 x 1/2" PPH SMS | 2 |
| a) | 30-009003-00 | Flipper Link | 1 | 12 | 10-000018-00 | End Of Stroke Switch Brkt | 1 |
| b) | 11-000003-00 | Flipper Plunger | 1 | 13 | 91-006000-00 | Tinnerman Nut, Leaf Switch Stack | 1 |
| c) | 94-004002-00 | 5/32" x 7/16" Roll Pin | 1 | 14 | 90-004010-06 | 10-32 x 3/8" SH CS | 2 |
| d) | 94-003001-00 | Flipper Crank & Link Bushing | 1 | 15 | 92-001010-00 | #10 Split Lock Washer | 2 |
| e) | 90-004010-14 | 10-32 x 7/8" SH CS | 1 | 16 | 80-000006-06 | 6-32 x 3/8" PPH MS | 3 |
| f) | 92-000010-00 | #10 Flat Washer, 0.226" ID, 0.5" OD, 0.05" TH | 2 | 17 | 91-000006-00 | 6-32 Nylon Stop Nut | 3 |
| g) | 91-000010-00 | 10-32 Nylon Stop Nut | 2 | | | | |
| h) | 10-000019-01 | Flipper Crank, Left | 1 | | | <i>for 52-000132-00, Left Flipper Assy, FL-15411, add:</i> | |
| i) | 92-000010-02 | #10 Flat Washer, 0.207" ID, 0.625" OD, 0.0975" TH | 1 | 18 | 23-002003-00 | FL-15411 Flipper Coil | 1 |
| j) | 10-000020-00 | Flipper Return Spring Brkt | 1 | 19 | 30-000014-35 | 2-3/16" Coil Tubing, Straight | 1 |
| k) | 90-000001-00 | Locking Stud Bolt | 1 | | | <i>for 52-000102-32R, Left Flipper Assy, Mod -LR, FL-11722, 3-Way, LR, add:</i> | |
| 3 | 10-007001-00 | Flipper Coil Stop Brkt | 1 | 18 | 23-002000-00 | FL-11722 Flipper Coil | 1 |
| 4 | 10-007002-01 | Flipper Coil Centering Brkt, 1-Way (-00, Left, Upper Left) | 1 | 19 | 30-000014-35 | 2-3/16" Coil Tubing, Straight | 1 |
| or | 10-007002-00 | Flipper Coil Centering Brkt, 3-Way (-32, Black Pearl Left) | 1 | | | (Note: orient the coil lugs to the right side of the assembly) | |
| 5 | 30-009002-00 | Flipper Bushing | 1 | | | | |
| 6 | 13-007001-00 | Flipper Return Spring | 1 | | | | |
| 7 | 18-000001-00 | End Of Stroke Leaf Switch | 1 | | | | |



Slingshot Assembly, 23-800

51-000003-00

| Item | Part Number | Description | Qty |
|------|-----------------|--|-----|
| 1 | 10-000042-00 | Slingshot Kicker Crank Assy | 1 |
| 2 | 10-000043-00 | Slingshot Kicker Crank Mtg Brkt | 1 |
| 3 | 10-005004-00 | Slingshot Coil Brkt | 1 |
| 4 | 10-007000-01 | Coil Centering Brkt, 5/8", 6-32 Studs | 1 |
| 5 | 11-005003-01 | Slingshot Plunger & Link Assy, 2-1/8" | 1 |
| 6 | 13-007004-00 | Slingshot Plunger Return Spring | 1 |
| 7 | 13-009002-00 | Hairpin Clip | 2 |
| 8 | 23-000003-00 | 23-800 Standard Coil | 1 |
| 9 | 30-000014-28 | 1-3/4" Coil Tubing, Straight | 1 |
| 10 | 91-000006-00 | 6-32 Nylon Stop Nut | 2 |
| 11 | 95-002651-20-67 | Flat Washer, 0.265" ID, 0.5" OD, 0.067" TH | 1 |



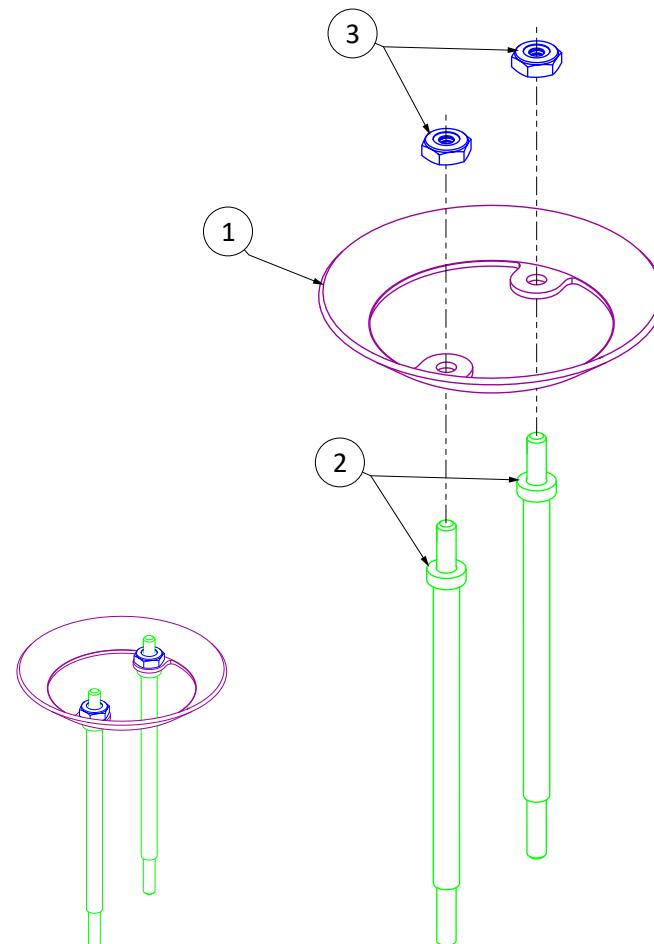
Vertical Up-Kicker Assembly

51-000009-00

| Item | Part Number | Description | Qty |
|------|----------------|--|-----|
| 1 | 10-005005-00 | VUK Coil Brkt | 1 |
| 2 | 10-007004-00 | Coil Centering Brkt, 5/8", 1/2" Mnts, 8-32 Studs | 1 |
| 3 | 11-005001-00 | VUK Armature Plunger Assy | 1 |
| 4 | 13-007005-00 | VUK Plunger Return Spring | 1 |
| 5 | 15-005004-00 | VUK Opto PCB Assy, Receiver | 1 |
| a) | 15-000005-01 | VUK Phototransistor Bd (WHT, GRN wires) | 1 |
| b) | 24-000003-0T | Phototransistor, IR, QSD123, 880nm, 5mm | 1 |
| c) | 30-000038-00 | Opto Base, Black | 1 |
| d) | 82-000004-06 | #4 x 3/8" PPH SMS | 1 |
| 6 | 15-005004-01 | VUK Opto PCB Assy, Transmitter | 1 |
| a) | 15-000005-00 | VUK Infrared LED Bd (RED, BLK wires) | 1 |
| b) | 24-000002-0T | LED, IR Emitting, QED123, 880nm, 5mm | 1 |
| c) | 30-000039-00 | Opto Base, White | 1 |
| d) | 82-000004-06 | #4 x 3/8" PPH SMS | 1 |
| 7 | 23-000003-00 | 23-800 Standard Coil | 1 |
| 8 | 25-009001-00 | Rubber Bumper Plug, Black | 1 |
| 9 | 30-000014-30-1 | 1-7/8" Coil Tubing, Flanged | 1 |
| 10 | 83-000006-06 | 6-32 x 3/8" PPH Screw, Type 25 Thread Cutter | 4 |
| 11 | 91-000008-00 | 8-32 Nylon Stop Nut | 2 |

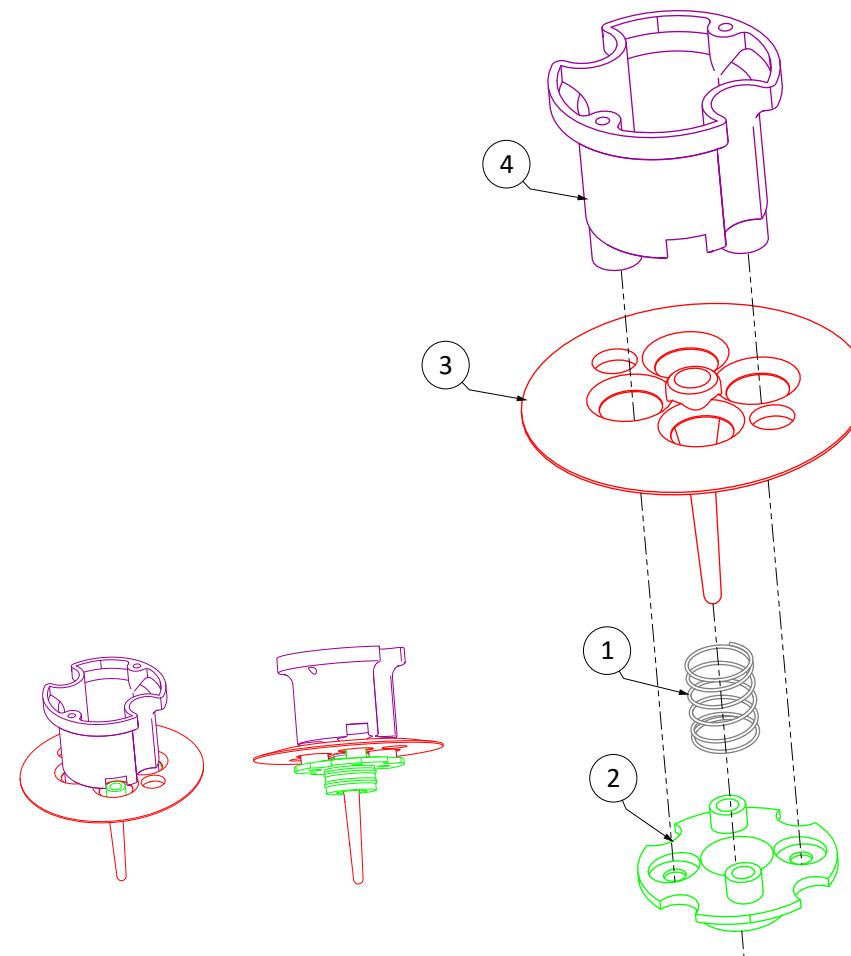
Pop Bumper Ring & Rod Assembly
11-005004-01

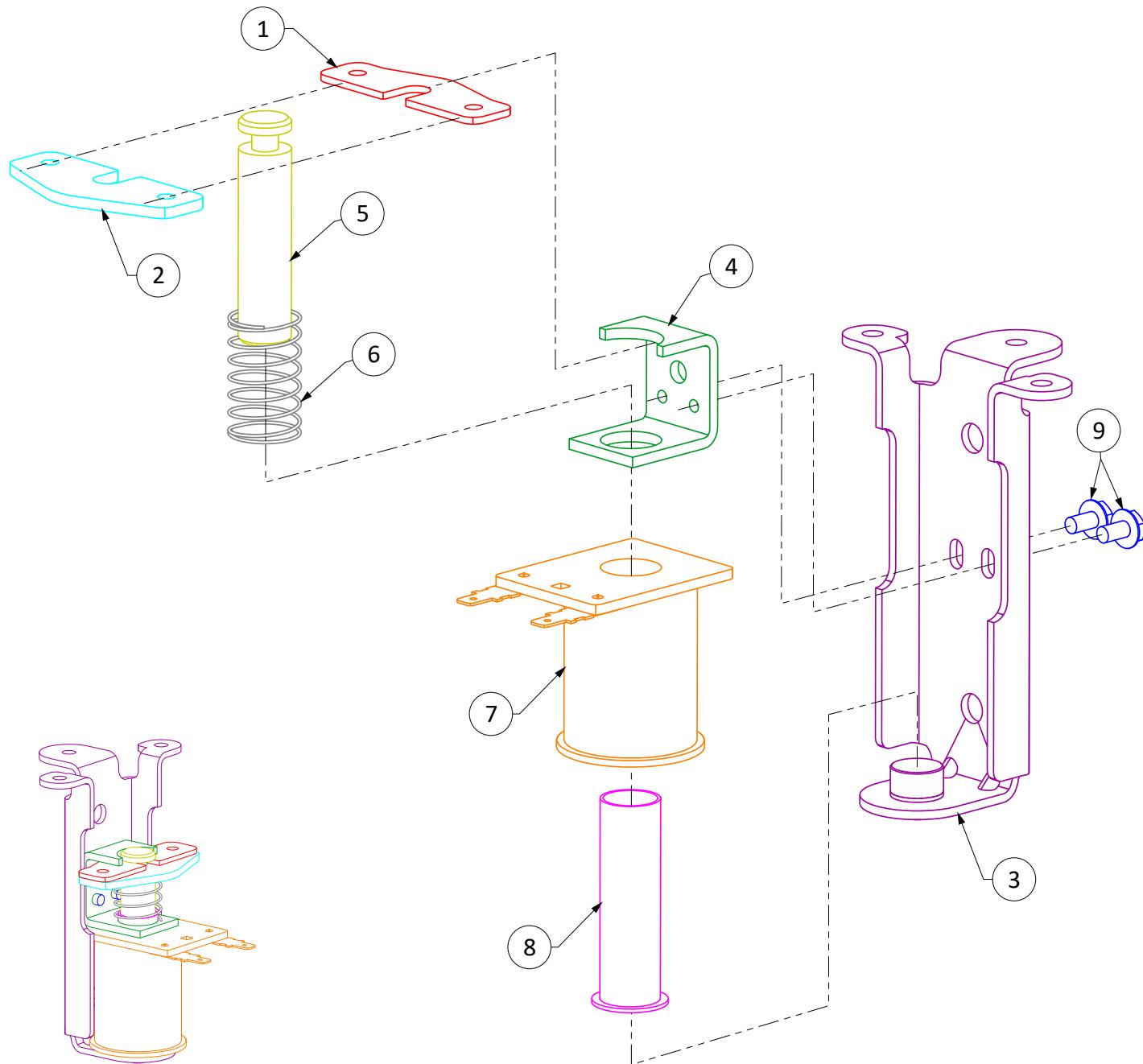
| Item | Part Number | Description | Qty |
|------|--------------|---------------------|-----|
| 1 | 11-000005-00 | Pop Bumper Ring | 1 |
| 2 | 11-000008-00 | Pop Bumper Rod | 2 |
| 3 | 91-000006-00 | 6-32 Nylon Stop Nut | 2 |



Pop Bumper Top Assembly, White/White/White
51-000106-999

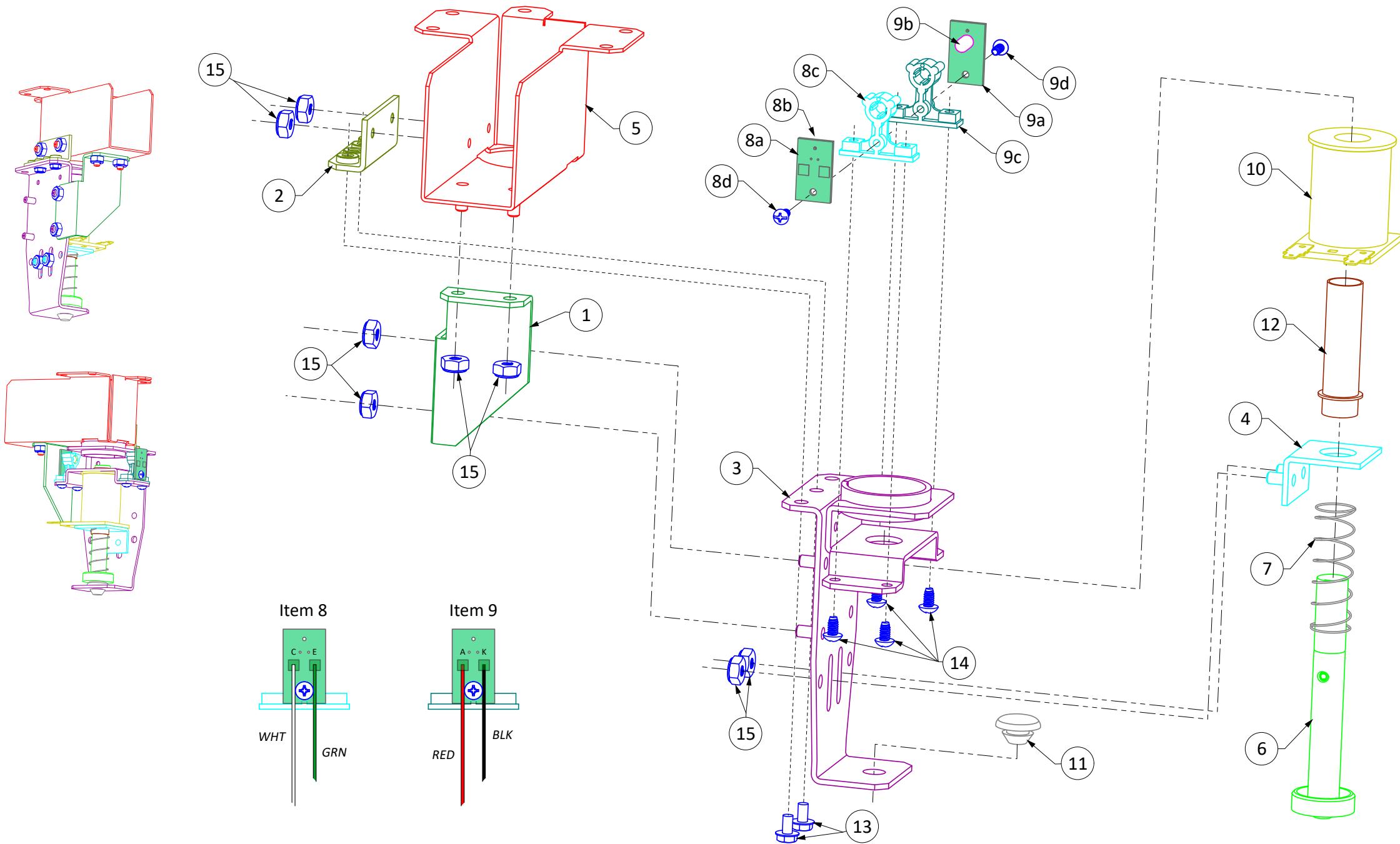
| Item | Part Number | Description | Qty |
|------|--------------|-------------------------|-----|
| 1 | 13-007003-00 | Pop Bumper Skirt Spring | 1 |
| 2 | 30-000003-09 | Pop Bumper Base, White | 1 |
| 3 | 30-000004-09 | Pop Bumper Skirt, White | 1 |
| 4 | 30-000005-09 | Pop Bumper Body, White | 1 |





Pop Bumper Bottom Assembly, 26-1200 51-000004-01

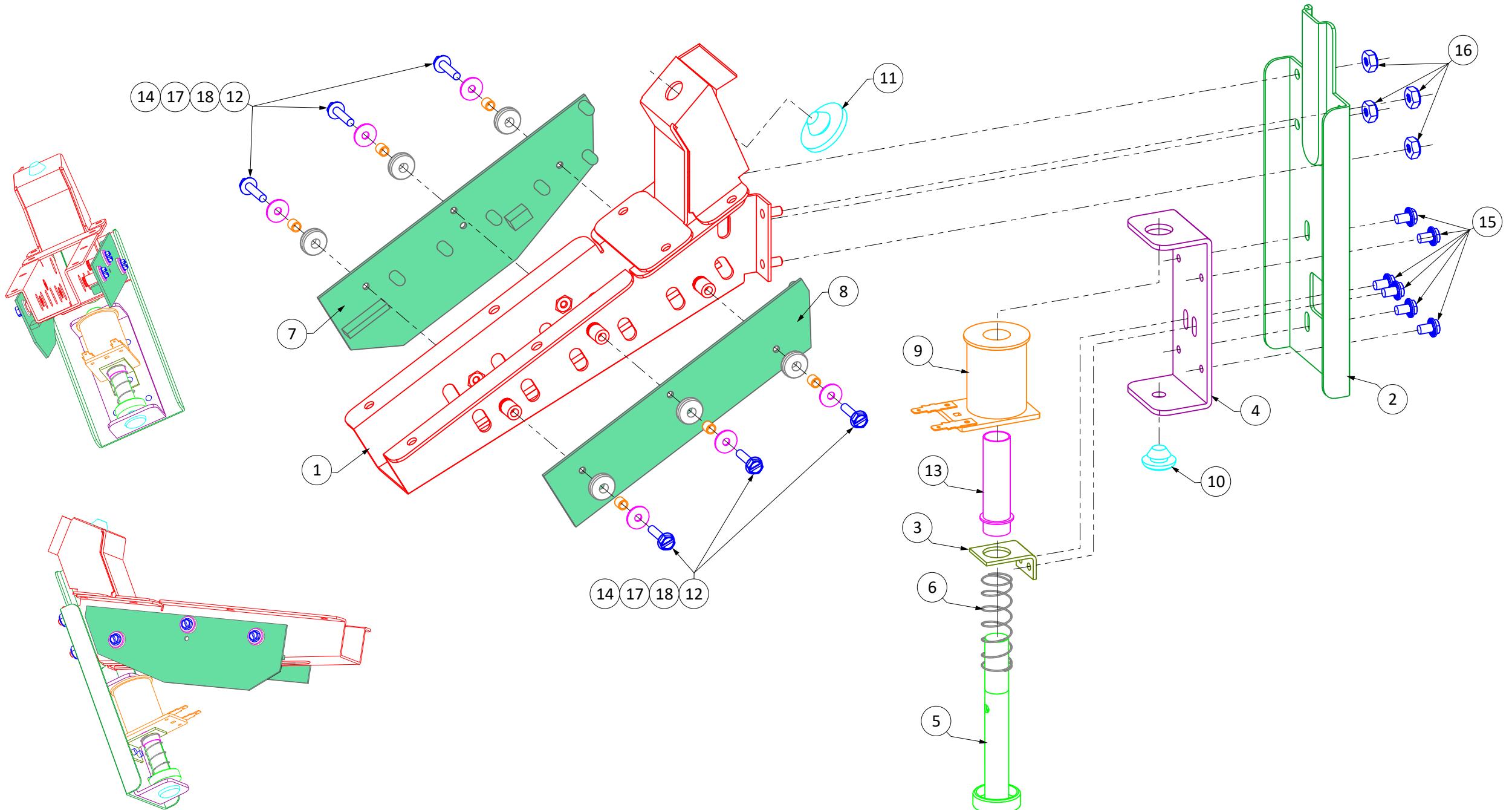
| Item | Part Number | Description | Qty |
|------|--------------|---------------------------------------|-----|
| 1 | 10-000021-00 | Pop Bumper Yoke, Steel | 1 |
| 2 | 10-000021-01 | Pop Bumper Yoke, Bakelite | 1 |
| 3 | 10-005003-00 | Pop Bumper Coil Brkt | 1 |
| 4 | 10-007003-00 | Pop Bumper Coil Centering Brkt | 1 |
| 5 | 11-000004-00 | Pop Bumper Plunger | 1 |
| 6 | 13-007002-00 | Pop Bumper Plunger Return Spring | 1 |
| 7 | 23-000010-00 | 26-1200 Standard Coil | 1 |
| 8 | 30-000014-28 | 1-3/4" Coil Tubing, Straight | 1 |
| 9 | 80-002006-04 | 6-32 x 1/4" HWH Phillips MS, Serrated | 2 |



VUK/Steel Trough Assembly, Right Mount

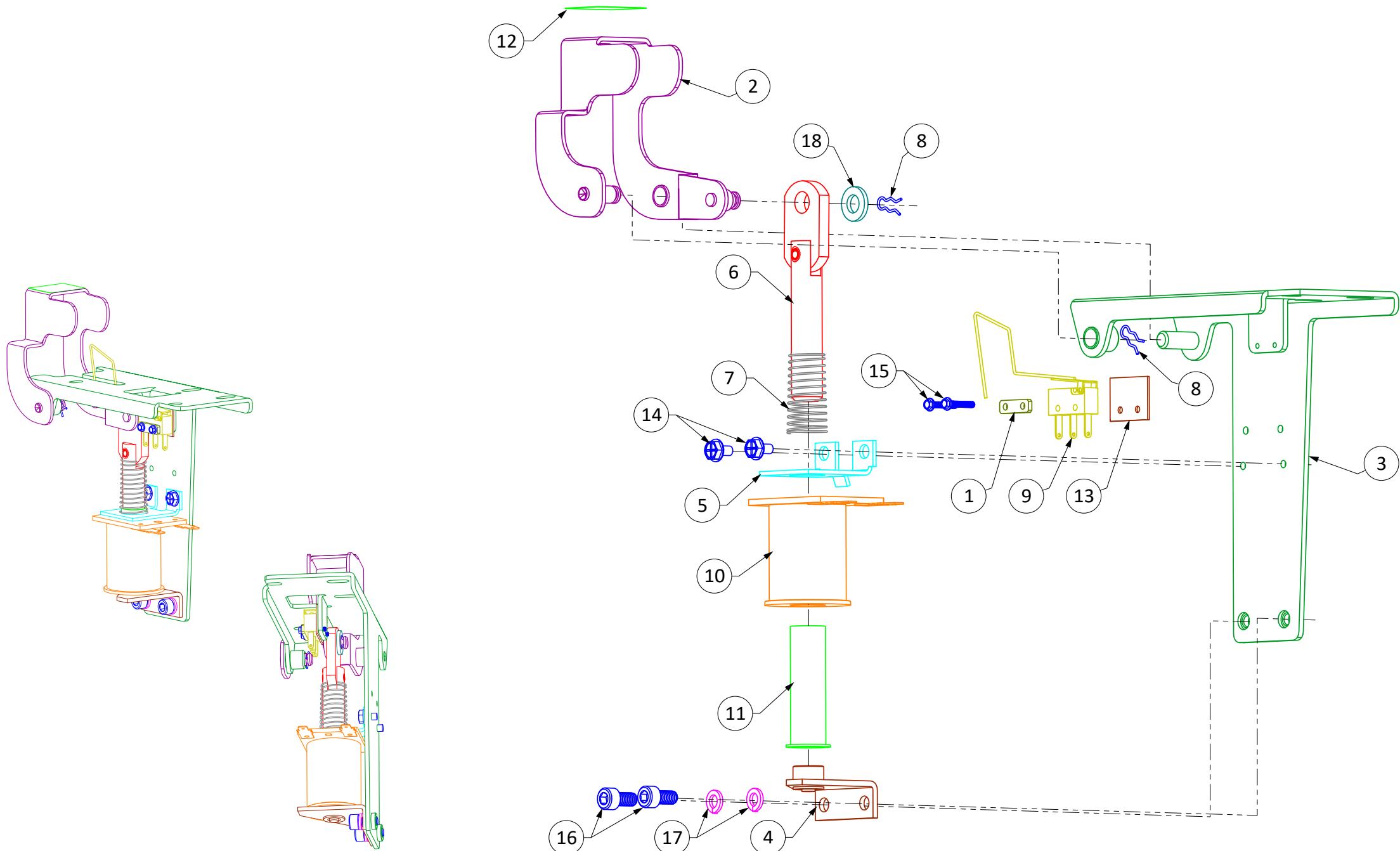
51-000012-00

| Item | Part Number | Description | Qty |
|-------------|--------------------|--|------------|
| 1 | 10-000145-01 | Trough Mount VUK Brkt, Right | 1 |
| 2 | 10-000145-02 | Trough Mount VUK Brkt, Center | 1 |
| 3 | 10-005005-01 | Trough Mount VUK Coil Brkt | 1 |
| 4 | 10-007004-00 | Coil Centering Brkt, 5/8", 1/2" Mnts, 8-32 Studs | 1 |
| 5 | 10-009004-00 | VUK Steel Entry Trough, Right | 1 |
| 6 | 11-005001-00 | VUK Armature Plunger Assy | 1 |
| 7 | 13-007005-00 | VUK Plunger Return Spring | 1 |
| 8 | 15-005004-00 | VUK Opto PCB Assy, Receiver | 1 |
| a) | 15-000005-01 | VUK Phototransistor Bd (WHT, GRN wires) | 1 |
| b) | 24-000003-0T | Phototransistor, IR, QSD123, 880nm, 5mm | 1 |
| c) | 30-000038-00 | Opto Base, Black | 1 |
| d) | 82-000004-06 | #4 x 3/8" PPH SMS | 1 |
| 9 | 15-005004-01 | VUK Opto PCB Assy, Transmitter | 1 |
| a) | 15-000005-00 | VUK Infrared LED Bd (RED, BLK wires) | 1 |
| b) | 24-000002-0T | LED, IR Emitting, QED123, 880nm, 5mm | 1 |
| c) | 30-000039-00 | Opto Base, White | 1 |
| d) | 82-000004-06 | #4 x 3/8" PPH SMS | 1 |
| 10 | 23-000003-00 | 23-800 Standard Coil | 1 |
| 11 | 25-009001-00 | Rubber Bumper Plug, Black | 1 |
| 12 | 30-000014-30-1 | 1-7/8" Coil Tubing, Flanged | 1 |
| 13 | 80-002008-04 | 8-32 x 1/4" HWH Phillips MS, Serrated | 2 |
| 14 | 83-000006-06 | 6-32 x 3/8" PPH Screw, Type 25 Thread Cutter | 4 |
| 15 | 91-000008-00 | 8-32 Nylon Stop Nut | 8 |



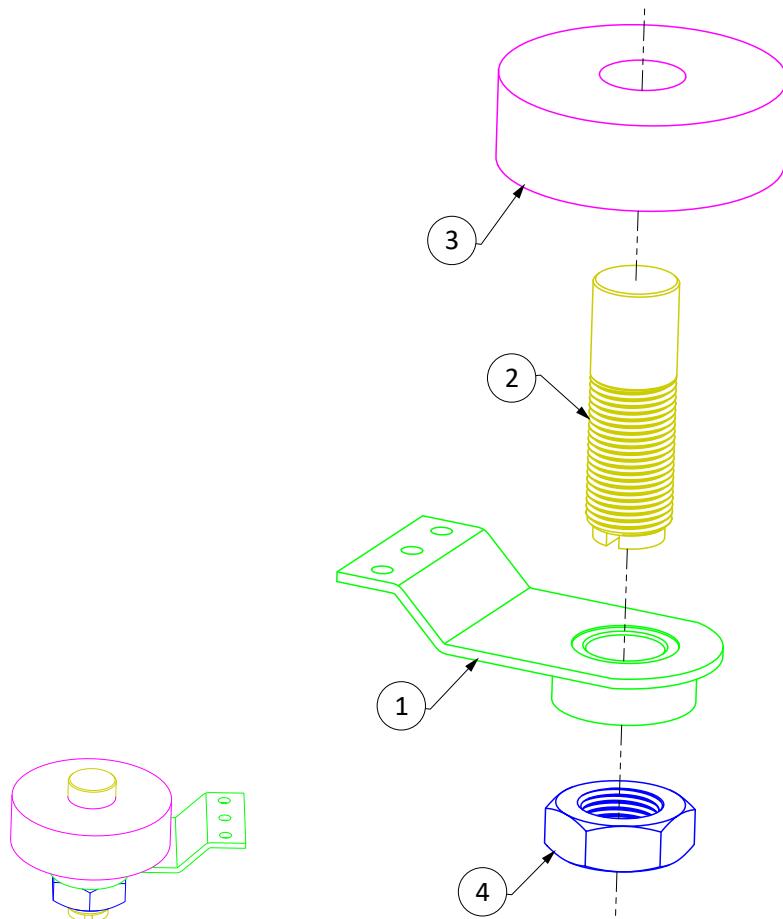
5-Ball Trough Assembly
51-000021-00

| Item | Part Number | Description | Qty |
|-------------|--------------------|---|------------|
| 1 | 10-005010-00 | Ball Trough Main Brkt | 1 |
| 2 | 10-005010-01 | Ball Trough Coil Brkt | 1 |
| 3 | 10-007000-00 | Coil Centering Brkt, 5/8", 3/8" Mnts, 8-32 Tapped | 1 |
| 4 | 10-007006-00 | Ball Trough Coil Mtg Brkt | 1 |
| 5 | 11-005001-00 | VUK Armature Plunger Assy | 1 |
| 6 | 13-007005-00 | VUK Plunger Return Spring | 1 |
| 7 | 15-000004-00 | 5-Ball Trough Opto Receiver Bd | 1 |
| 8 | 15-000004-01 | 5-Ball Trough Opto Transmitter Bd | 1 |
| 9 | 23-000010-00 | 26-1200 Standard Coil | 1 |
| 10 | 25-009001-00 | Rubber Bumper Plug, Black | 1 |
| 11 | 25-009001-01 | Ball Trough Bumper Plug, Blue | 1 |
| 12 | 25-009006-00 | Rubber Grommet, Ball Trough PCB Mtg | 6 |
| 13 | 30-000014-30-1 | 1-7/8" Coil Tubing, Flanged | 1 |
| 14 | 80-002006-10 | 6-32 x 5/8" HWH Phillips MS, Serrated | 6 |
| 15 | 80-002008-04 | 8-32 x 1/4" HWH Phillips MS, Serrated | 6 |
| 16 | 91-000008-00 | 8-32 Nylon Stop Nut | 4 |
| 17 | 92-000006-00 | #6 Flat Washer, 0.141" ID, 0.437" OD | 6 |
| 18 | 94-003002-00 | Ball Trough PCB Metal Bushing | 6 |



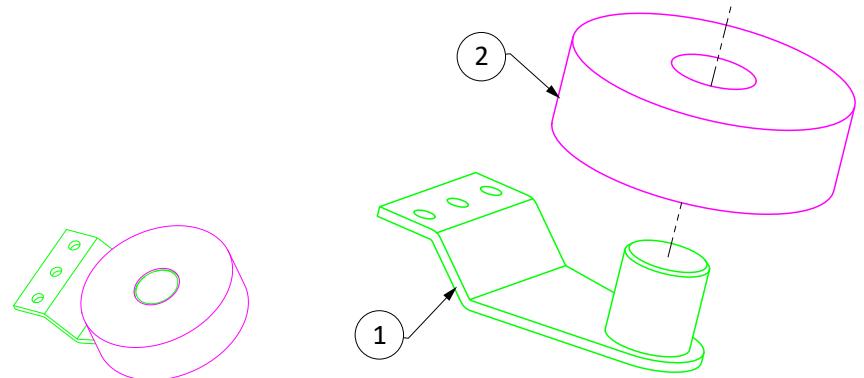
Auto-Launch Assembly
51-000026-00

| Item | Part Number | Description | Qty |
|-------------|--------------------|--|------------|
| 1 | 10-000024-01 | Microswitch Protector Plate, #2 | 1 |
| 2 | 10-000028-00 | Auto-Launch Crank Brkt | 1 |
| 3 | 10-005009-00 | Auto-Launch Coil Brkt | 1 |
| 4 | 10-007005-00 | Auto-Launch Coil Stop Brkt | 1 |
| 5 | 10-007009-00 | Coil Centering Brkt, 3/4" | 1 |
| 6 | 11-005000-00 | Flipper Coil Plunger & Link Assy | 1 |
| 7 | 13-007004-00 | Slingshot Plunger Return Spring | 1 |
| 8 | 13-009002-00 | Hairpin Clip | 2 |
| 9 | 18-003001-00 | Auto-Launch Microswitch & Wireform | 1 |
| 10 | 23-000003-00 | 23-800 Standard Coil | 1 |
| 11 | 30-000014-28 | 1-3/4" Coil Tubing, Straight | 1 |
| 12 | 62-000002-00 | Auto-Launch Crank Decal | 1 |
| 13 | 70-009002-00 | Microswitch Insulator, Fish Paper | 1 |
| 14 | 80-002006-04 | 6-32 x 1/4" HWH Phillips, Serrated | 2 |
| 15 | 80-002102-08 | 2-56 x 1/2" HWH MS, Black | 2 |
| 16 | 90-004010-06 | 10-32 x 3/8" SH CS, Black | 2 |
| 17 | 92-001010-00 | #10 Split Lock Washer | 2 |
| 18 | 95-002651-20-67 | Flat Washer, 0.265" ID, 0.5" OD, 0.067" TH | 1 |



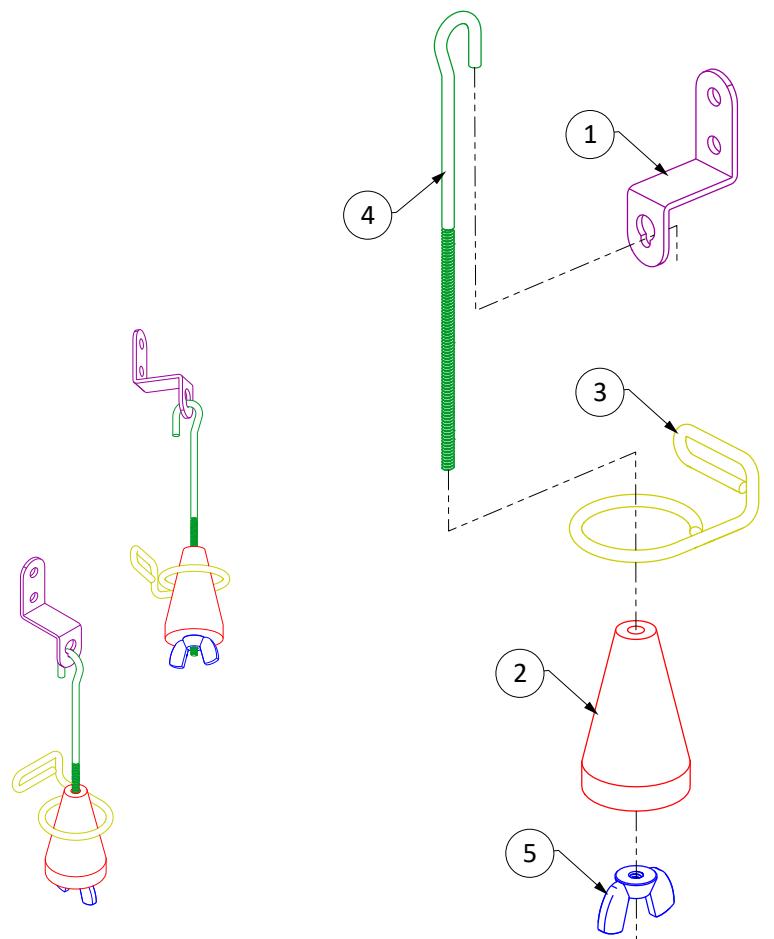
Playfield Magnet Assembly, Adjustable Core
51-000024-00

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 10-005008-00 | Playfield Magnet Brkt, Adjustable Core | 1 |
| 2 | 11-000012-00 | Magnet Pole Shaft | 1 |
| 3 | 23-004005-00 | 22-675 Lg Magnet Coil | 1 |
| 4 | 91-002034-00 | 3/4-16 Hex Jam Nut | 1 |



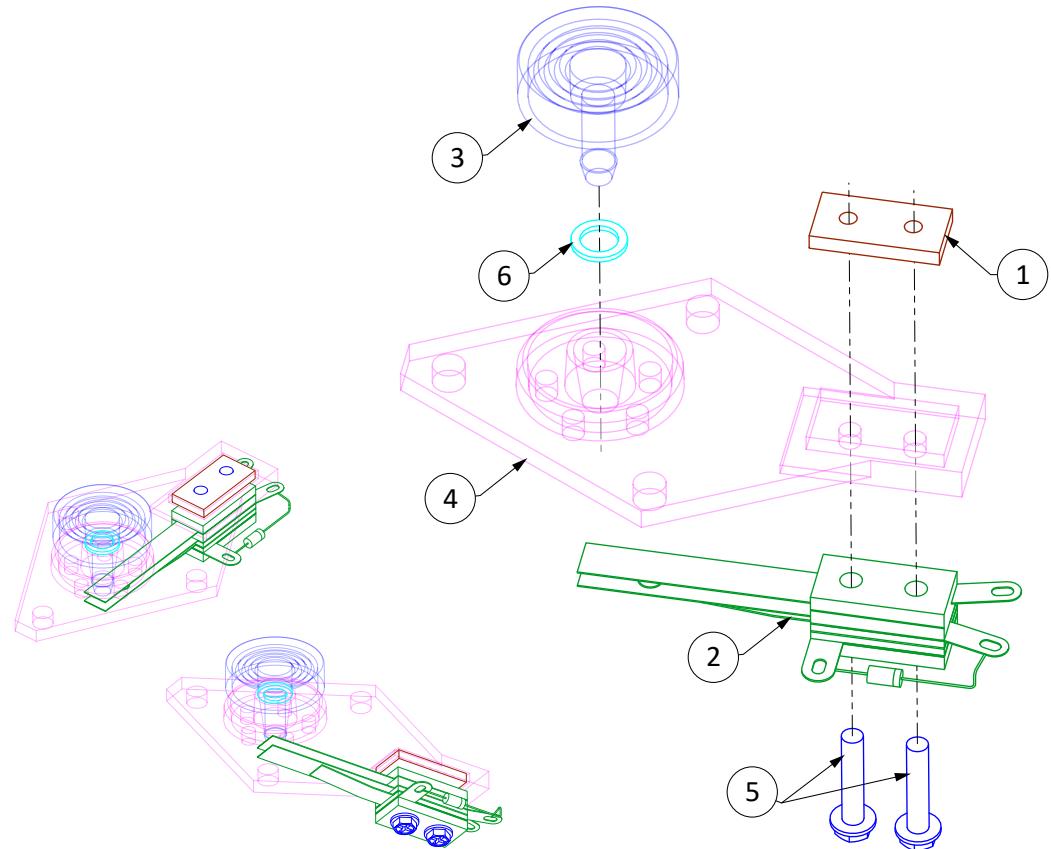
Playfield Magnet Assembly, Fixed Core
51-000024-01

| Item | Part Number | Description | Qty |
|------|--------------|-----------------------------------|-----|
| 1 | 10-005008-01 | Playfield Magnet Brkt, Fixed Core | 1 |
| 2 | 23-004005-00 | 22-675 Lg Magnet Coil | 1 |



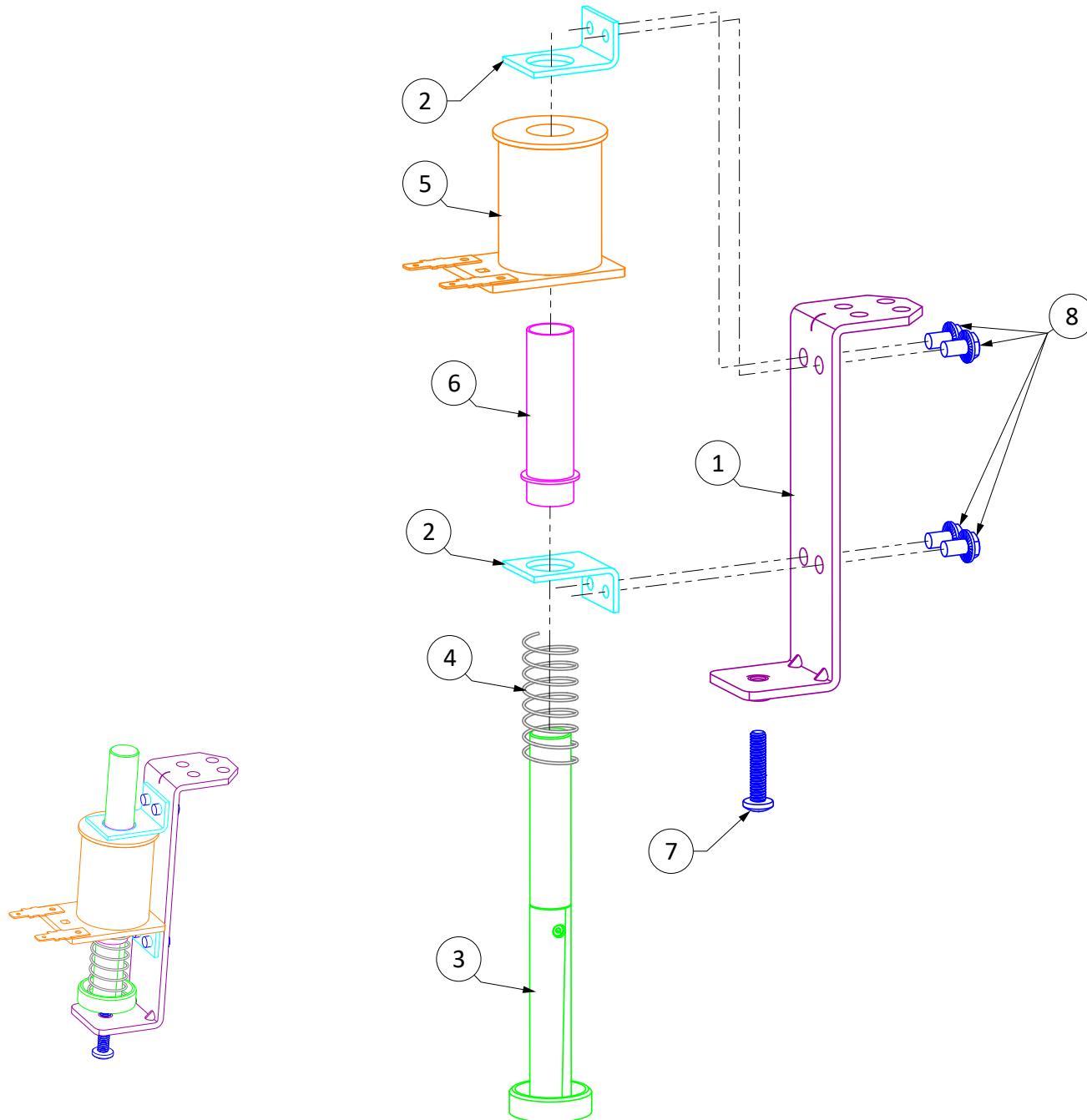
Plumb Bob Tilt Assembly
51-000028-00

| Item | Part Number | Description | Qty |
|------|--------------|-----------------------------|-----|
| 1 | 10-000086-00 | Tilt Hanger Wire Brkt | 1 |
| 2 | 11-000028-00 | Plumb Bob Weight | 1 |
| 3 | 13-003008-00 | Tilt Contact Wire Form Brkt | 1 |
| 4 | 13-003009-00 | Tilt Hanger Wire | 1 |
| 5 | 91-003406-00 | 6-32 Wing Nut, Nylon | 1 |



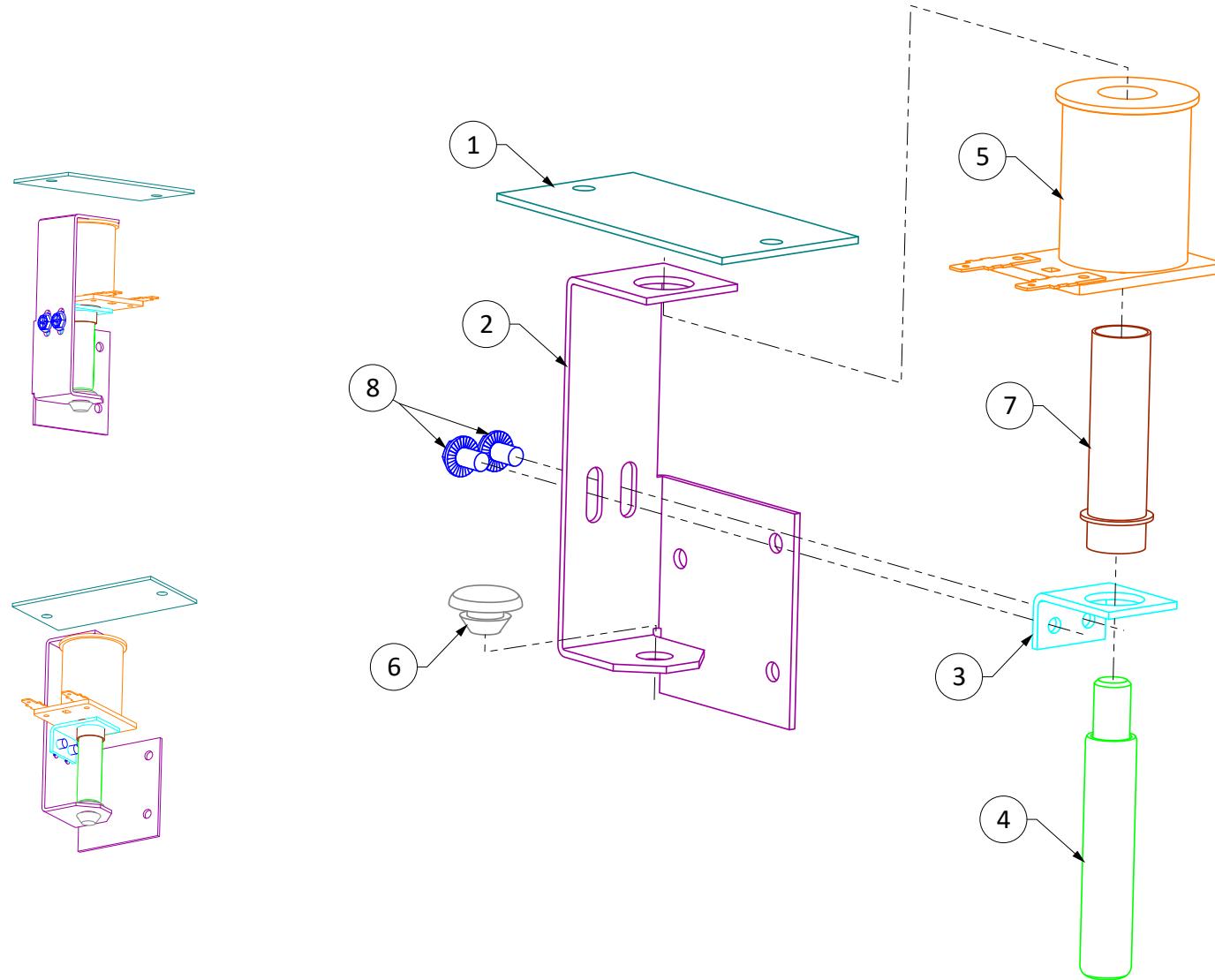
Rollover Button Switch Assembly
18-007003-00

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000024-02 | Switch Nut Plate, 5-40 | 1 |
| 2 | 18-000004-00 | Rollover Button Leaf Switch | 1 |
| 3 | 30-000008-13 | Rollover Button, Clear | 1 |
| 4 | 30-000010-00 | Rollover Base, Plastic | 1 |
| 5 | 80-002005-10 | 5-40 x 5/8" HWH Phillips MS, Serrated | 2 |
| 6 | 92-000630-00 | Nylon Washer, 0.22" ID, 0.32" OD, 0.032" TH | 1 |



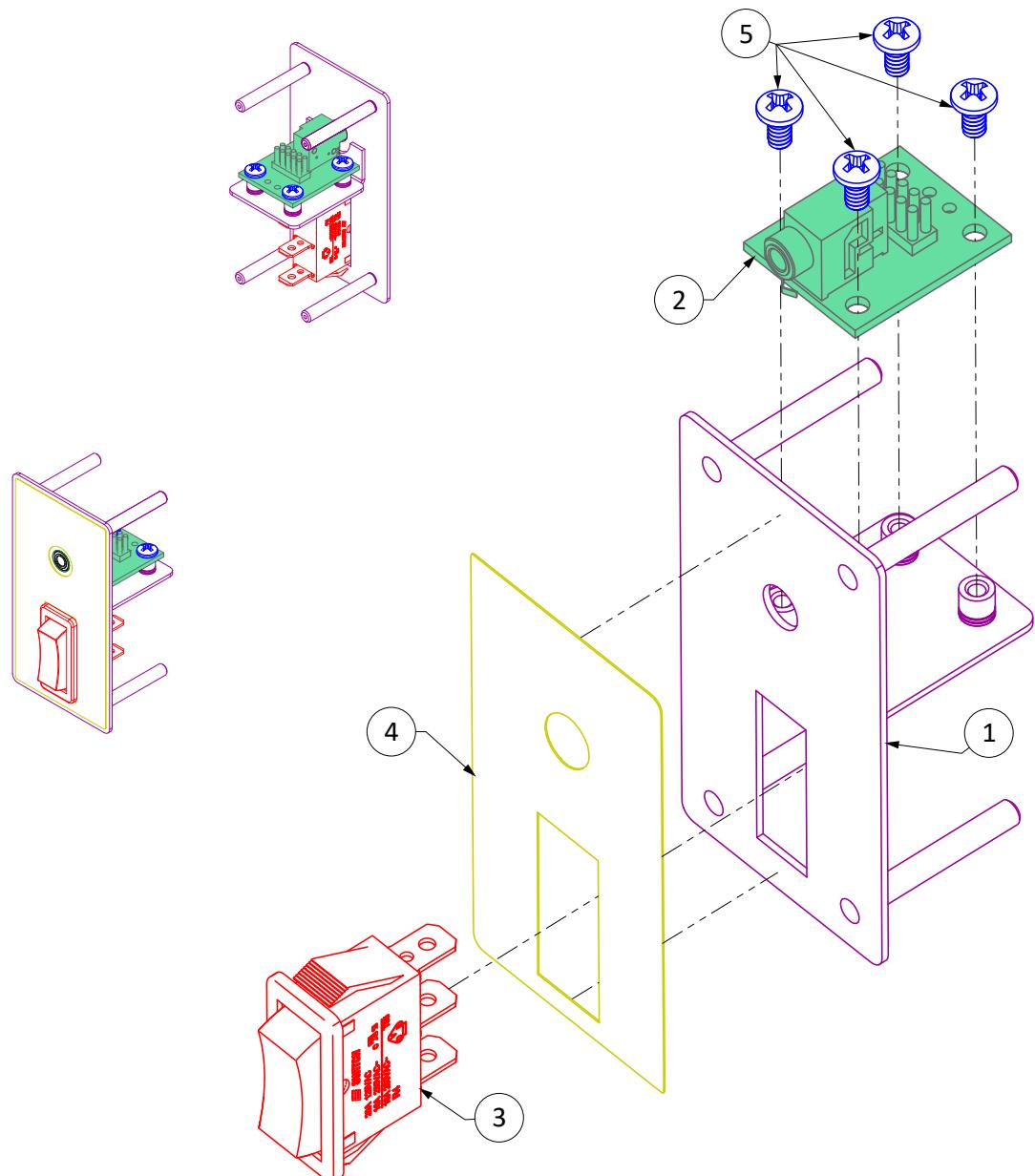
**Disappearing Post Assembly, 0.4375" Diam
51-000030-10**

| Item | Part Number | Description | Qty |
|------|----------------|---|-----|
| 1 | 10-005027-00 | Disappearing Post Coil Brkt | 1 |
| 2 | 10-007000-00 | Coil Centering Brkt, 5/8", 3/8" Mnts, 8-32 Tapped | 2 |
| 3 | 11-005009-10 | Disappearing Post Plunger Assy, 7/16" Diam | 1 |
| 4 | 13-007005-00 | VUK Plunger Return Spring | 1 |
| 5 | 23-000010-00 | 26-1200 Standard Coil | 1 |
| 6 | 30-000014-30-1 | 1-7/8" Coil Tubing, Flanged | 1 |
| 7 | 80-000308-12 | 8-32 x 3/4" PPH MS, Brass | 1 |
| 8 | 80-002008-04 | 8-32 x 1/4" HWH Phillips MS, Serrated | 4 |



Knocker Assembly, Vertical
51-000032-01

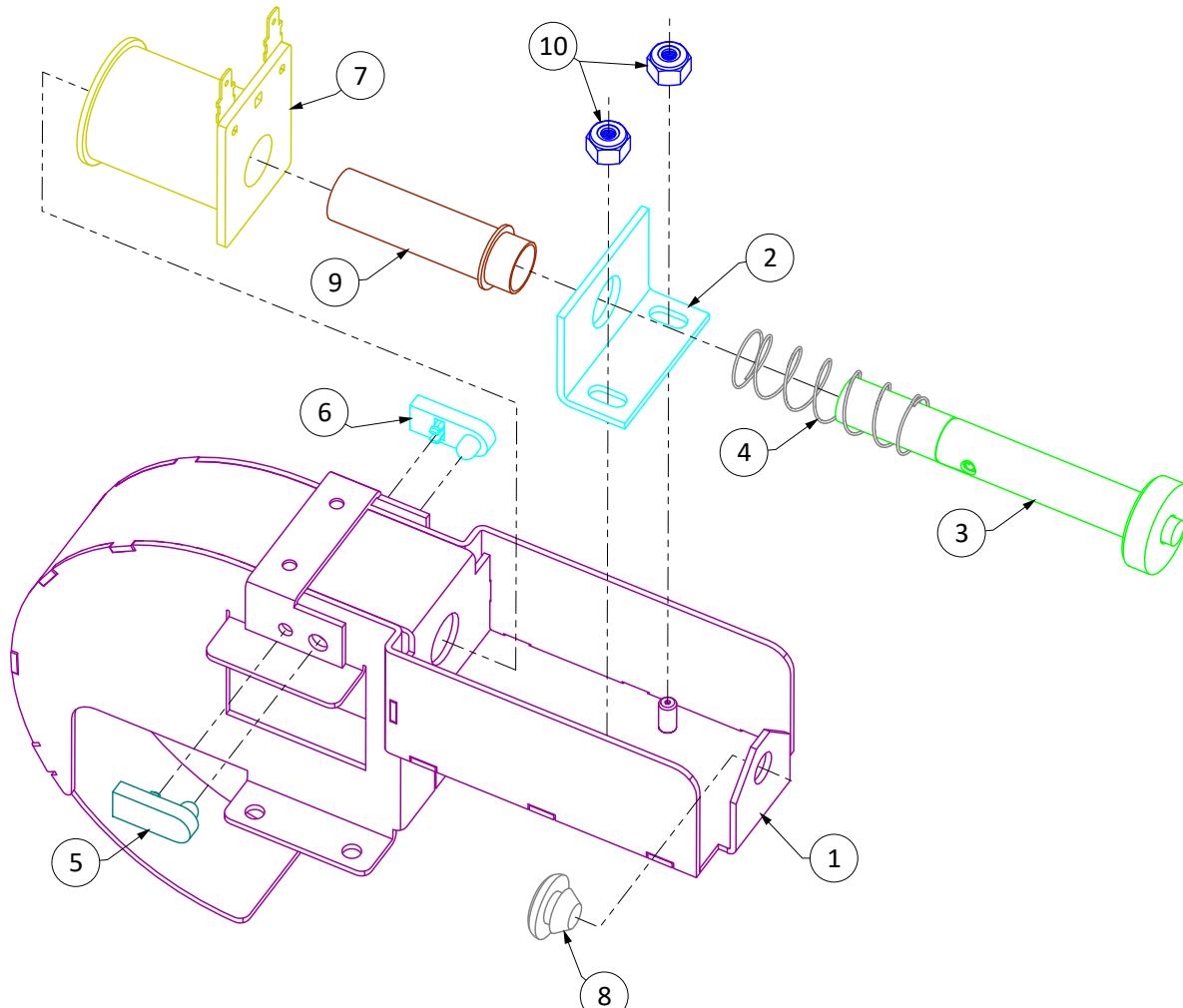
| Item | Part Number | Description | Qty |
|------|----------------|---|-----|
| 1 | 10-000016-00 | Knocker Strike Plate | 1 |
| 2 | 10-005007-00 | Kickback/Knocker Coil Brkt, Left Mount | 1 |
| 3 | 10-007000-00 | Coil Centering Brkt, 5/8", 3/8" Mnts, 8-32 Tapped | 1 |
| 4 | 11-000011-00 | Knocker Plunger Assy | 1 |
| 5 | 23-000003-00 | 23-800 Standard Coil | 1 |
| 6 | 25-009001-00 | Rubber Bumper Plug, Black | 1 |
| 7 | 30-000014-30-1 | 1-7/8" Coil Tubing, Flanged | 1 |
| 8 | 80-002008-04 | 8-32 x 1/4" HWH Phillips MS, Serrated | 2 |



Cabinet Headphone Jack Assembly

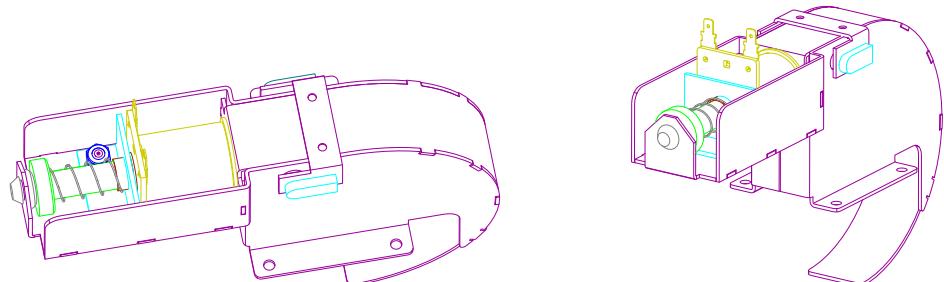
51-000064-00

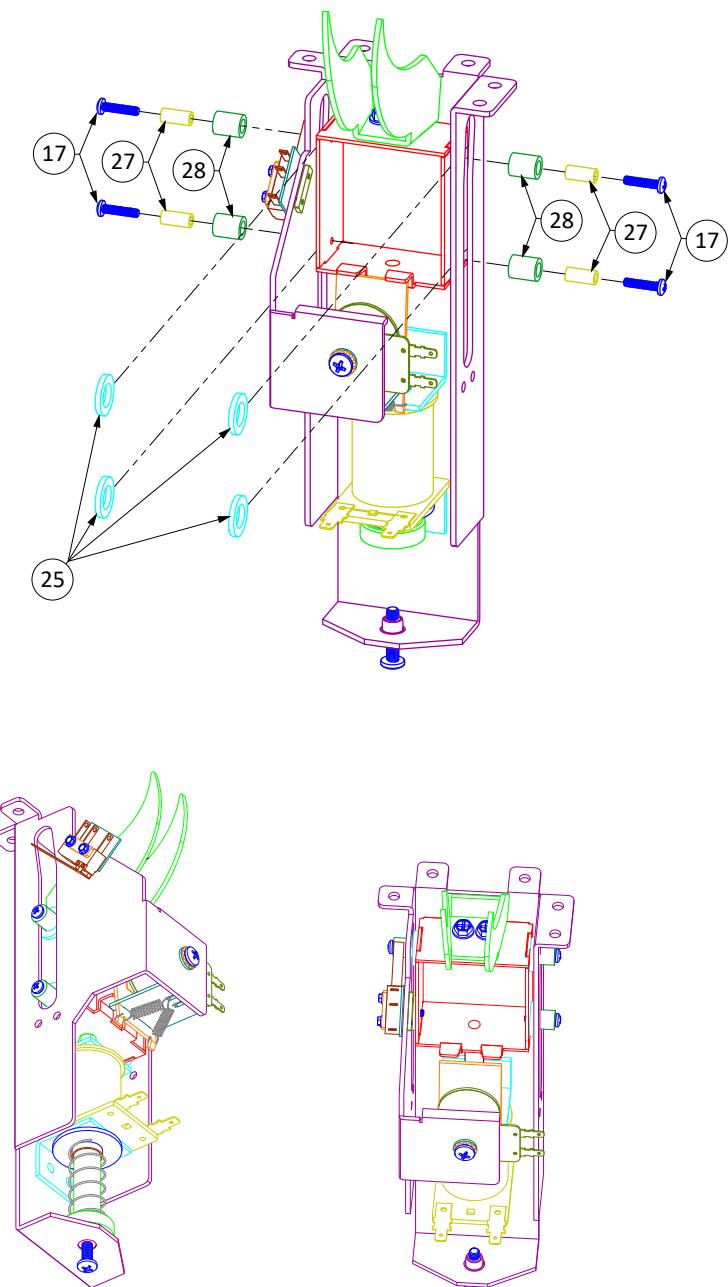
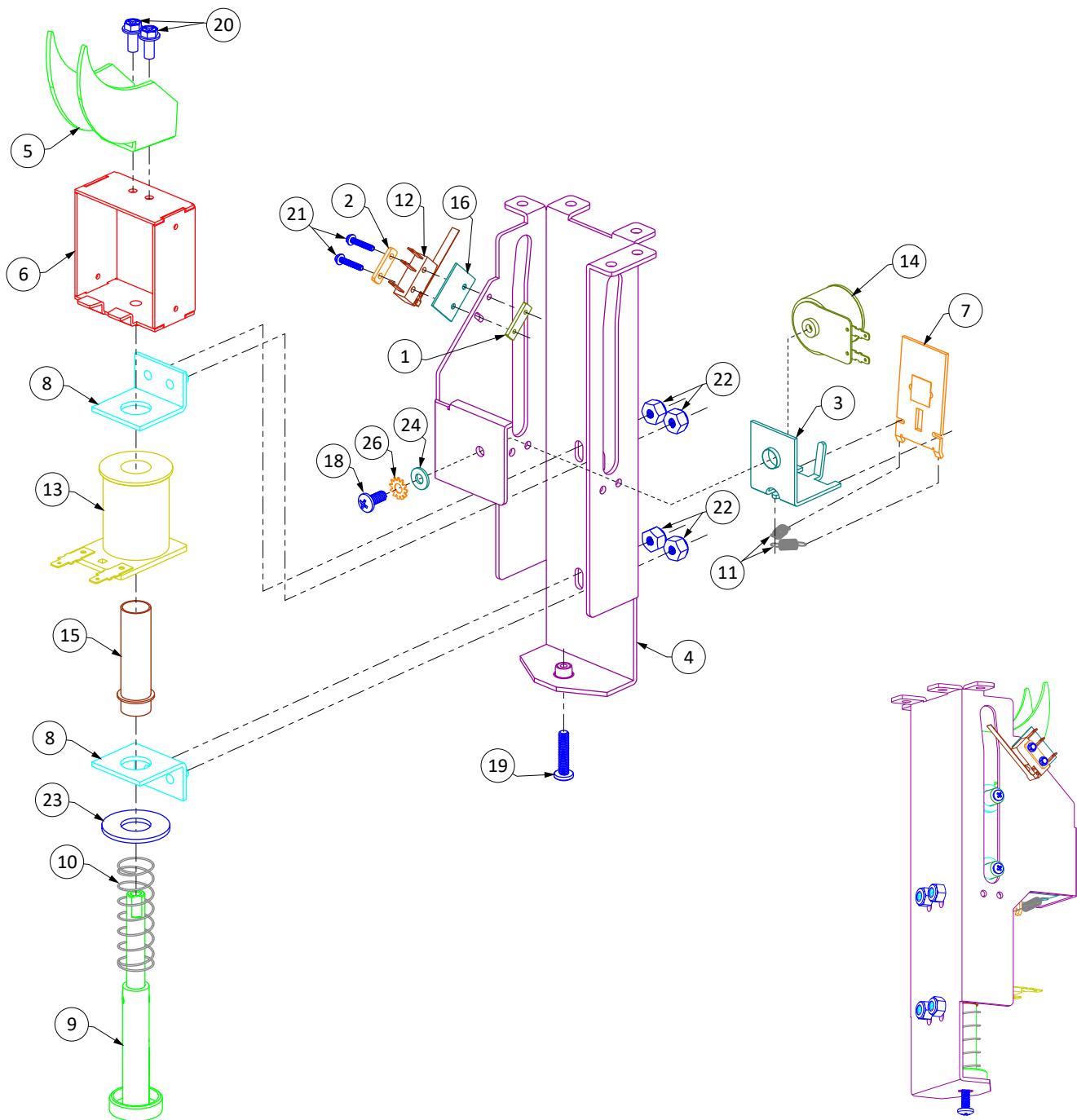
| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 10-000197-00 | Cabinet Headphone Mtg Plate | 1 |
| 2 | 15-000052-00 | Cabinet Headphone Bd | 1 |
| 3 | 18-003006-01 | Volume Control Switch, Rocker Style, SPDT, 15A | 1 |
| 4 | 62-000030-02 | Cabinet Headphone Jack Decal | 1 |
| 5 | 80-000106-04 | 6-32 x 1/4" PPH MS, Black | 4 |



Ball Scoop Assembly, Right Side Entrance
51-000083-01

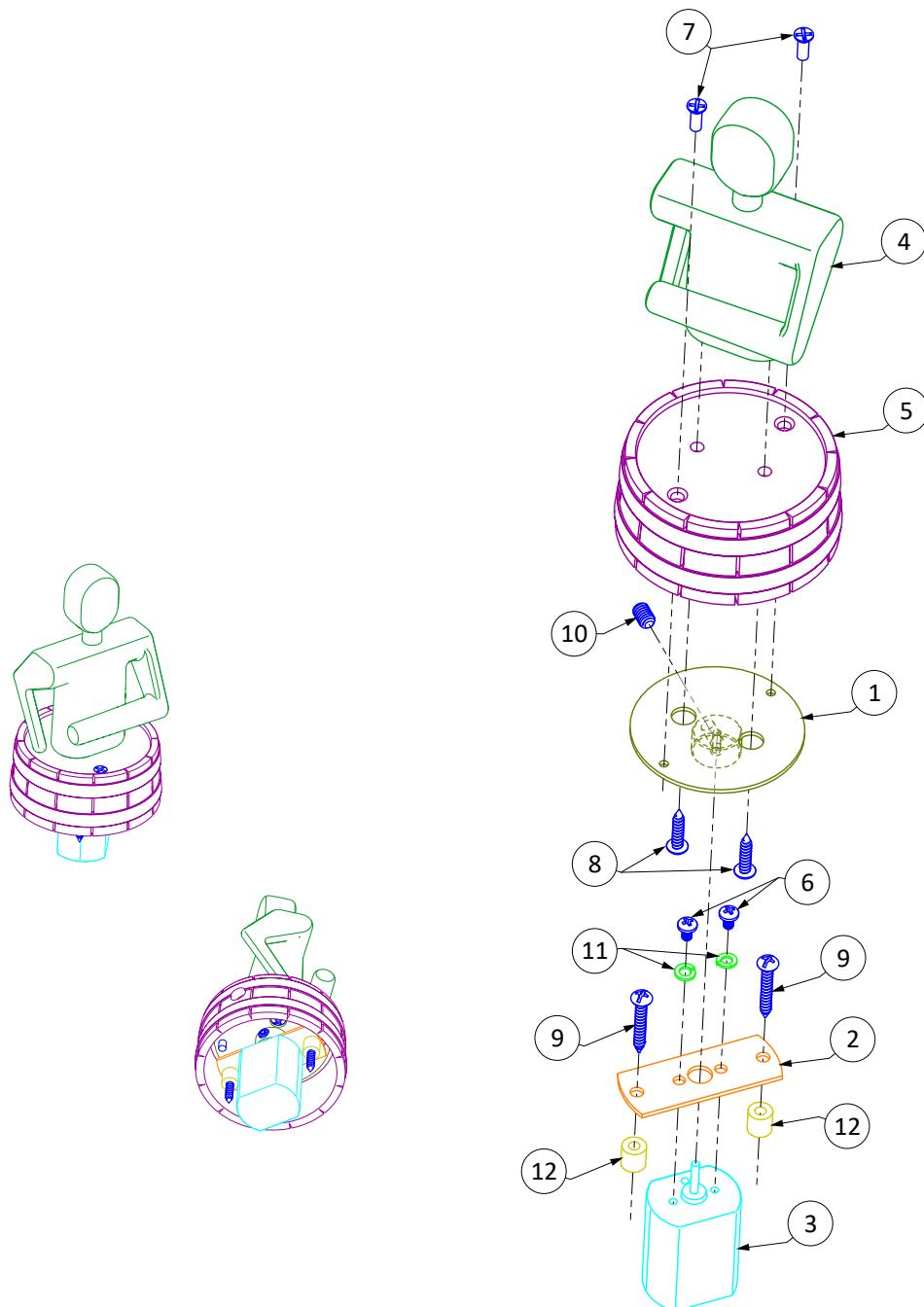
| Item | Part Number | Description | Qty |
|------|----------------|---|-----|
| 1 | 10-005036-01 | Ball Scoop Weldment, Right Side Entrance | 1 |
| 2 | 10-007014-02 | Coil Centering Brkt, 5/8", Slotted, 1.56" W | 1 |
| 3 | 11-005001-00 | VUK Armature Plunger Assy | 1 |
| 4 | 13-007005-00 | VUK Plunger Return Spring | 1 |
| 5 | 18-005001-00 | Infrared LED Assy | 1 |
| 6 | 18-005001-01 | Phototransistor Assy | 1 |
| 7 | 23-000003-00 | 23-800 Standard Coil | 1 |
| 8 | 25-009001-00 | Rubber Bumper Plug, Black | 1 |
| 9 | 30-000014-30-1 | 1-7/8" Coil Tubing, Flanged | 1 |
| 10 | 91-000008-00 | 8-32 Nylon Stop Nut | 2 |





Fork Lifter Assembly
51-000088-00

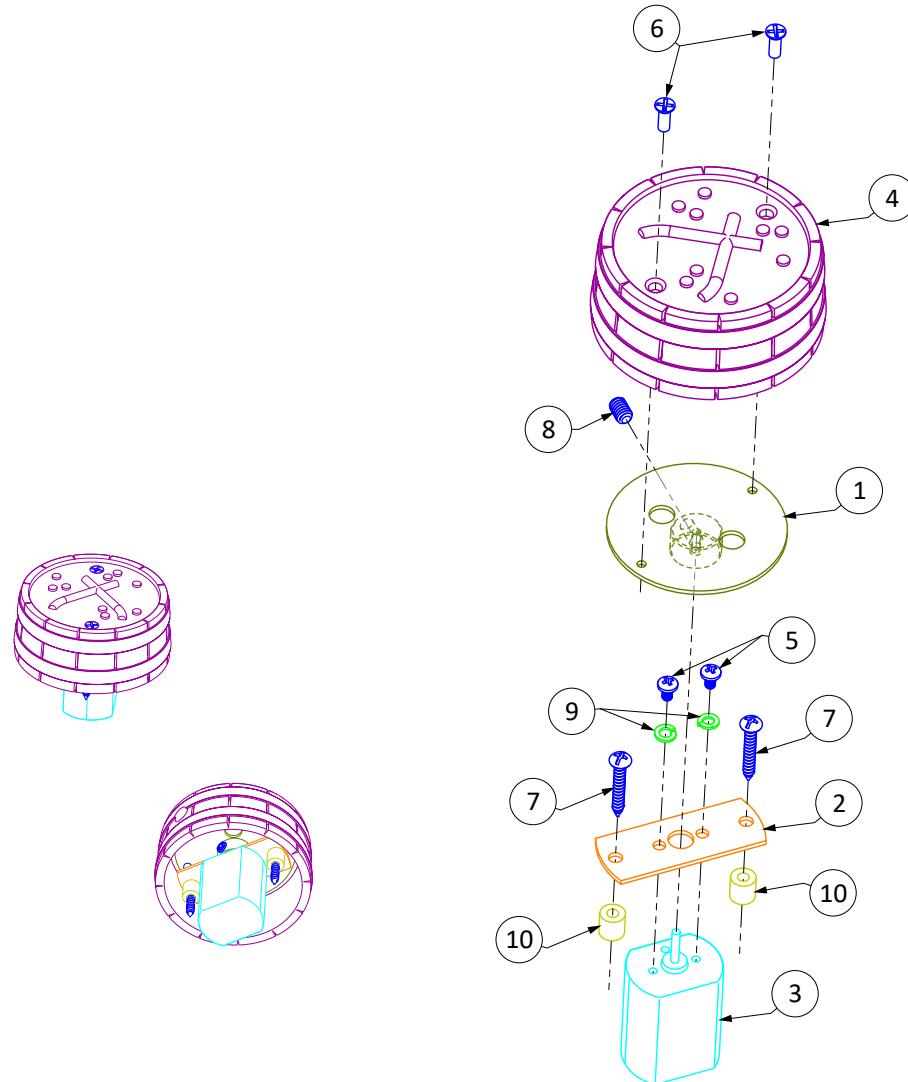
| Item | Part Number | Description | Qty |
|------|----------------|--|-----|
| 1 | 10-000024-00 | Microswitch Nut Plate, 2-56 | 1 |
| 2 | 10-000024-01 | Microswitch Protector Plate, #2 | 1 |
| 3 | 10-000213-09 | Trap Door Latch Trip Coil Frame & Eyelet Assy | 1 |
| 4 | 10-000243-00 | Fork Lifter Coil Mtg Brkt | 1 |
| 5 | 10-000243-01 | Fork Lifter Forks | 1 |
| 6 | 10-000243-02 | Fork Lifter Forks Support Brkt | 1 |
| 7 | 10-000243-06 | Fork Lifter Latch Coil Armature | 1 |
| 8 | 10-007004-00 | Coil Centering Brkt, 5/8", 1/2" Mnts, 8-32 Studs | 2 |
| 9 | 11-005015-00 | Fork Lifter Armature Plunger Assy | 1 |
| 10 | 13-007002-00 | Pop Bumper Plunger Return Spring | 1 |
| 11 | 13-007029-04 | Mini Coil Spring, 4oz Tension | 2 |
| 12 | 18-003011-00 | Ramp Entrance Microswitch & Blade | 1 |
| 13 | 23-000003-00 | 23-800 Standard Coil | 1 |
| 14 | 23-003008-01 | 26-600 Mini Coil Assy, 0.313" Core | 1 |
| 15 | 30-000014-30-1 | 1-7/8" Coil Tubing, Flanged | 1 |
| 16 | 70-009002-00 | Microswitch Insulator, Fish Paper | 1 |
| 17 | 80-000004-08 | 4-40 x 1/2" PPH MS | 4 |
| 18 | 80-000308-06 | 8-32 x 3/8" PPH MS, Brass | 1 |
| 19 | 80-000308-12 | 8-32 x 3/4" PPH MS, Brass | 1 |
| 20 | 80-002008-06 | 8-32 x 3/8" HWH Phillips MS, Serrated | 2 |
| 21 | 80-002102-08 | 2-56 x 1/2" HWH MS, Black | 2 |
| 22 | 91-000008-00 | 8-32 Nylon Stop Nut | 4 |
| 23 | 92-000044-01 | 7/16" Flat Washer, 0.5" ID, 1" OD, 0.065" TH | 1 |
| 24 | 92-000308-00 | #8 Flat Washer, 0.172" ID, 0.375" OD, Brass | 1 |
| 25 | 92-000632-00 | Nylon Washer, 0.328" ID, 0.562" OD, 0.063" TH | 4 |
| 26 | 92-003108-00 | #8 Ext-Tooth Lock Washer, 0.168" ID, 0.381" OD | 1 |
| 27 | 94-003214-065 | #4 x 13/32" Round Spacer, 3/16" OD, Alum | 4 |
| 28 | 94-005310-12 | #10 x 3/8" Round Spacer, 5/16" OD, Nylon | 4 |



POTC Pirate Spinning Pop Bumper Assy
51-000091-00

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 10-000256-00 | Spinning Pop Bumper Mtg Plate Weldment | 1 |
| 2 | 10-000256-01 | Spinning Pop Bumper Motor Mtg Plate | 1 |
| 3 | 23-005011-00 | Spinning Pop Bumper Top Motor | 1 |
| 4 | 32-000044-00 | POTC Pirate Spinning Pop Bumper Top Sculpture | 1 |
| 5 | 32-000044-01 | POTC Pirate Barrel Spinning Pop Bumper Top Sculpture | 1 |
| 6 | 80-000M25-04 | M2.5 x 4mm PPH MS | 2 |
| 7 | 80-006104-05 | 4-40 x 5/16" PFH MS, Black | 2 |
| 8 | 82-000004-08 | #4 x 1/2" PPH SMS | 2 |
| 9 | 82-000004-10 | #4 x 5/8" PPH SMS | 2 |
| 10 | 85-004008-04 | 8-32 x 1/4" Set Screw, Cup Point, Black | 1 |
| 11 | 92-001004-00 | #4 Split Lock Washer | 2 |
| 12 | 94-005204-08 | #4 x 1/4" Round Spacer, 1/4" OD, Nylon | 2 |

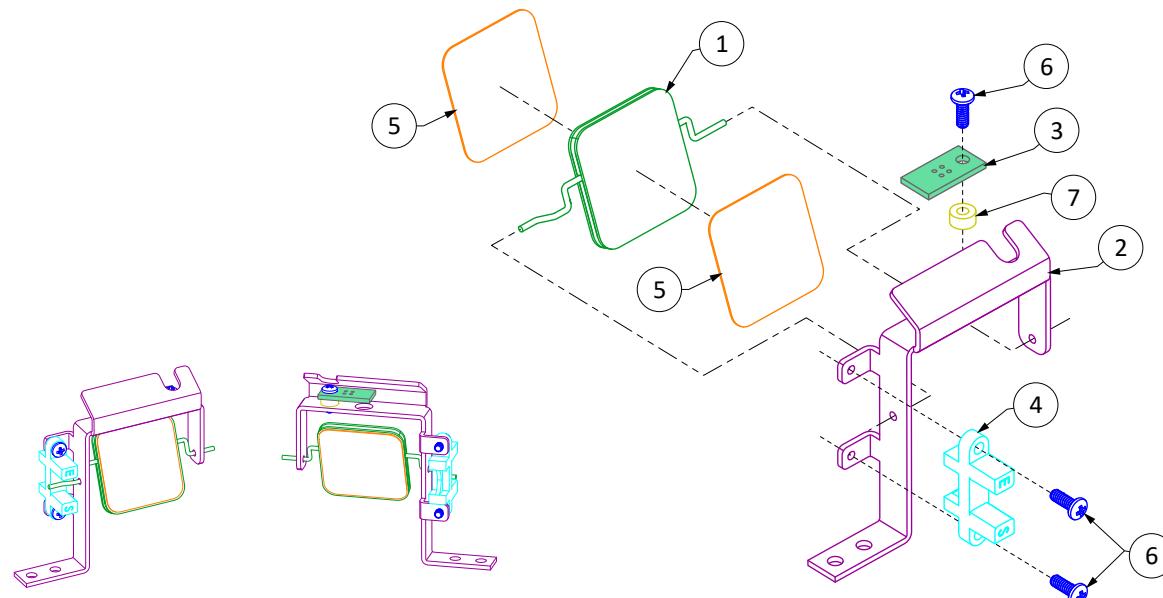
Note: Item 9 screws thread into the top holes of the Lower Middle Pop Bumper body (see item 4 in Pop Bumper Top Assy, 51-000106-999).



POTC Guns/Coins Spinning Pop Bumper Assy
51-000091-10

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 10-000256-00 | Spinning Pop Bumper Mtg Plate Weldment | 1 |
| 2 | 10-000256-01 | Spinning Pop Bumper Motor Mtg Plate | 1 |
| 3 | 23-005011-00 | Spinning Pop Bumper Top Motor | 1 |
| 4 | 32-000044-11 | POTC Guns/Coins Barrel Spinning Pop Bumper Top Sculpture | 1 |
| 5 | 80-000M25-04 | M2.5 x 4mm PPH MS | 2 |
| 6 | 80-006104-05 | 4-40 x 5/16" PFH MS, Black | 2 |
| 7 | 82-000004-10 | #4 x 5/8" PPH SMS | 2 |
| 8 | 85-004008-04 | 8-32 x 1/4" Set Screw, Cup Point, Black | 1 |
| 9 | 92-001004-00 | #4 Split Lock Washer | 2 |
| 10 | 94-005204-08 | #4 x 1/4" Round Spacer, 1/4" OD, Nylon | 2 |

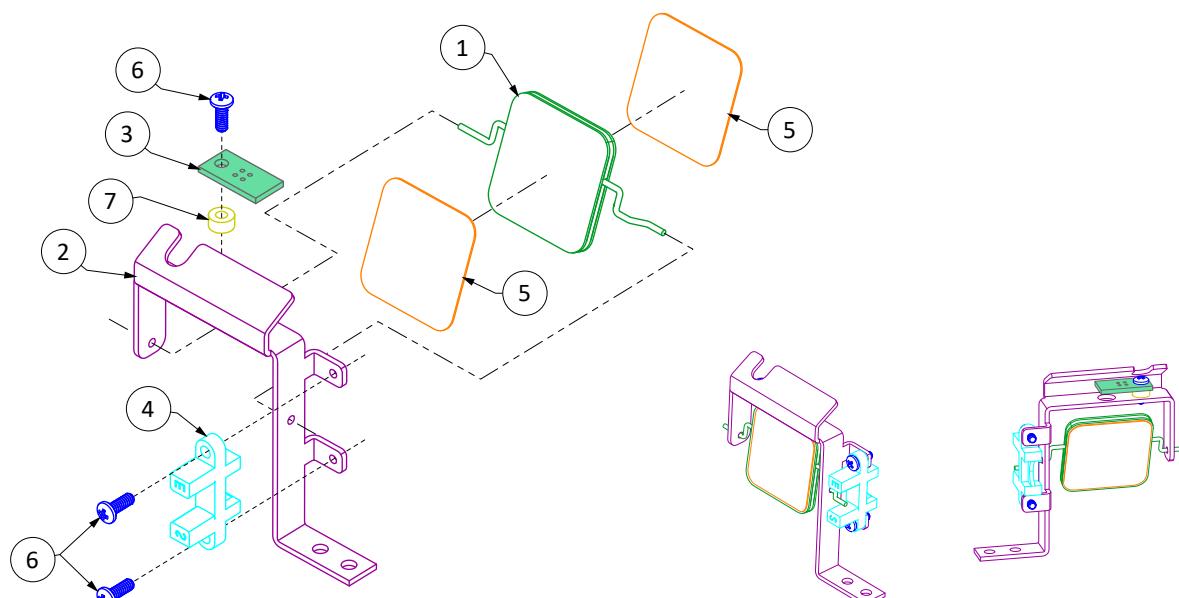
Note: Item 7 screws thread into the top holes of the Upper Pop Bumper body
 (see item 4 in Pop Bumper Top Assy, 51-000106-999).



Opto Spinner Assembly, Lighted, Right

51-000089-00

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000068-01 | Opto Spinner Tgt Assy | 1 |
| 2 | 10-005013-03 | Opto Spinner Brkt, Lighted, Right | 1 |
| 3 | 15-004251-15 | RGB GI PCB Assy, T LED FP, 5V, No Connector | 1 |
| 4 | 18-005003-00 | U-Shaped Opto, OPB812W | 1 |
| 5 | 62-000039-00 | Prism Spinner Decal | 2 |
| 6 | 80-000004-05 | 4-40 x 5/16" PPH MS | 3 |
| 7 | 94-005204-04 | #4 x 1/8" Round Spacer, 1/4" OD, Nylon | 1 |

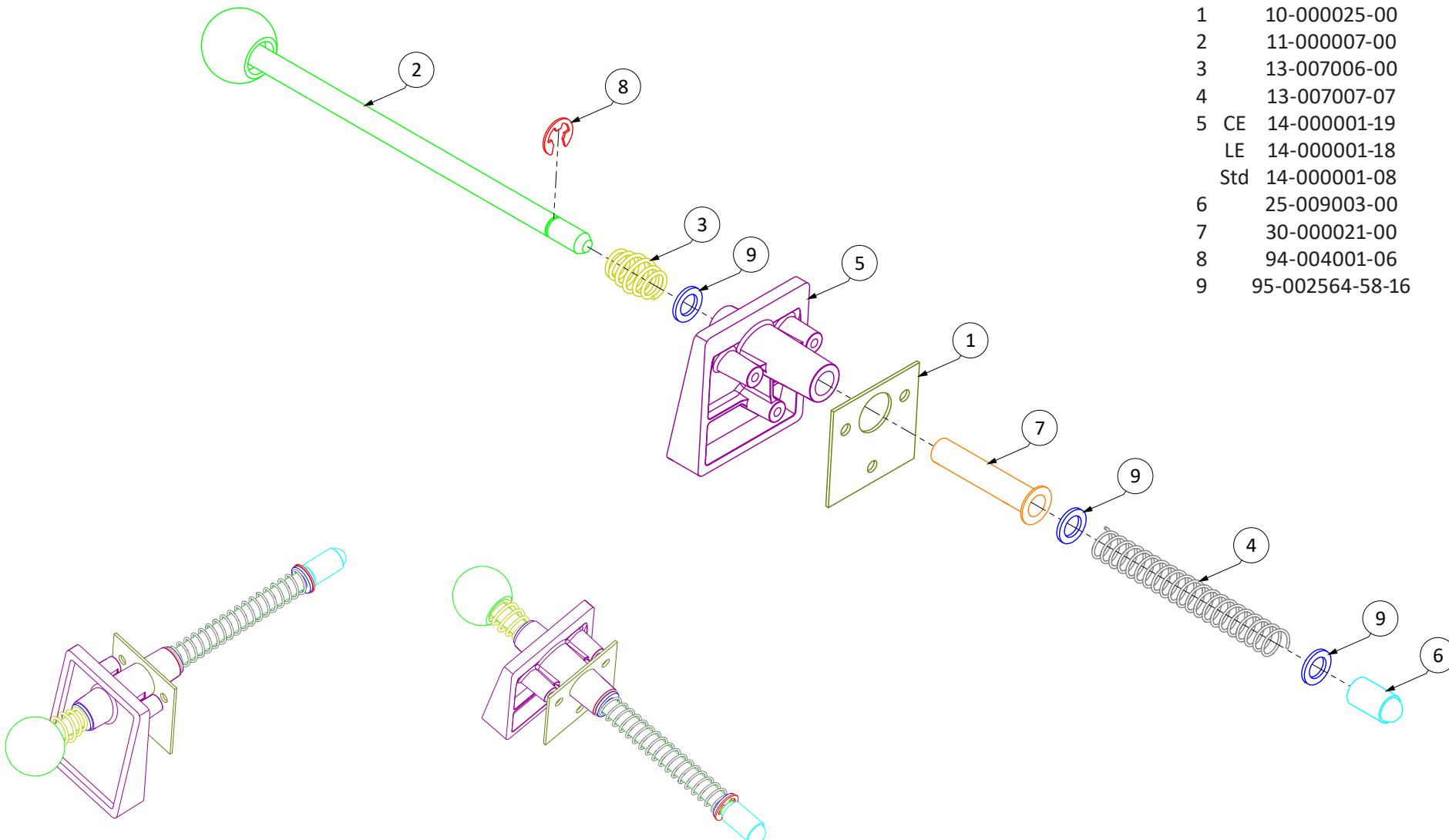


Opto Spinner Assembly, Lighted, Left

51-000089-01

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000068-01 | Opto Spinner Tgt Assy | 1 |
| 2 | 10-005013-04 | Opto Spinner Brkt, Lighted, Left | 1 |
| 3 | 15-004251-15 | RGB GI PCB Assy, T LED FP, 5V, No Connector | 1 |
| 4 | 18-005003-00 | U-Shaped Opto, OPB812W | 1 |
| 5 | 62-000039-00 | Prism Spinner Decal | 2 |
| 6 | 80-000004-05 | 4-40 x 5/16" PPH MS | 3 |
| 7 | 94-005204-04 | #4 x 1/8" Round Spacer, 1/4" OD, Nylon | 1 |

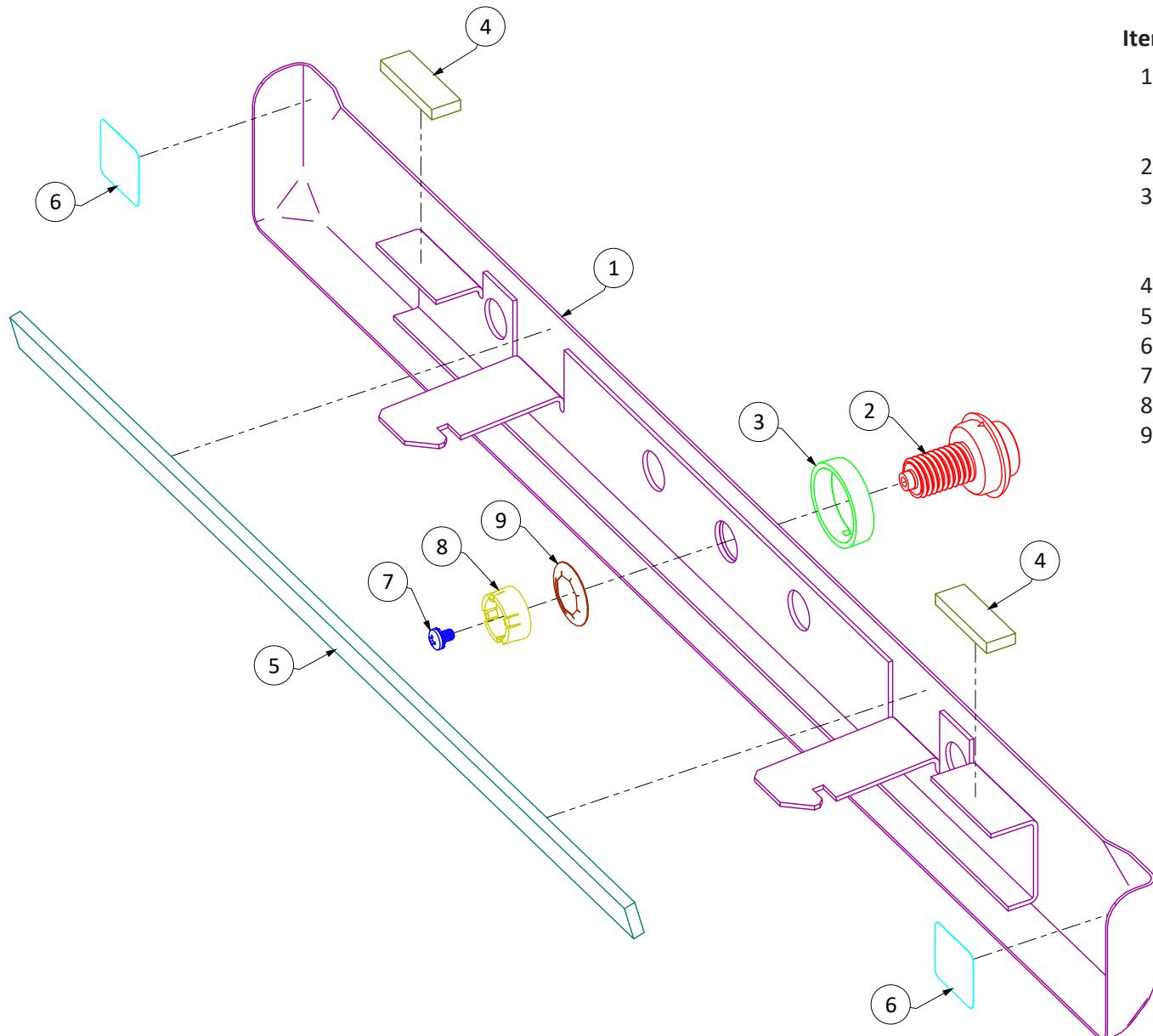
POTC Ball Shooter Assemblies
51-000092-00 (Std), -01 (LE), -02 (CE)



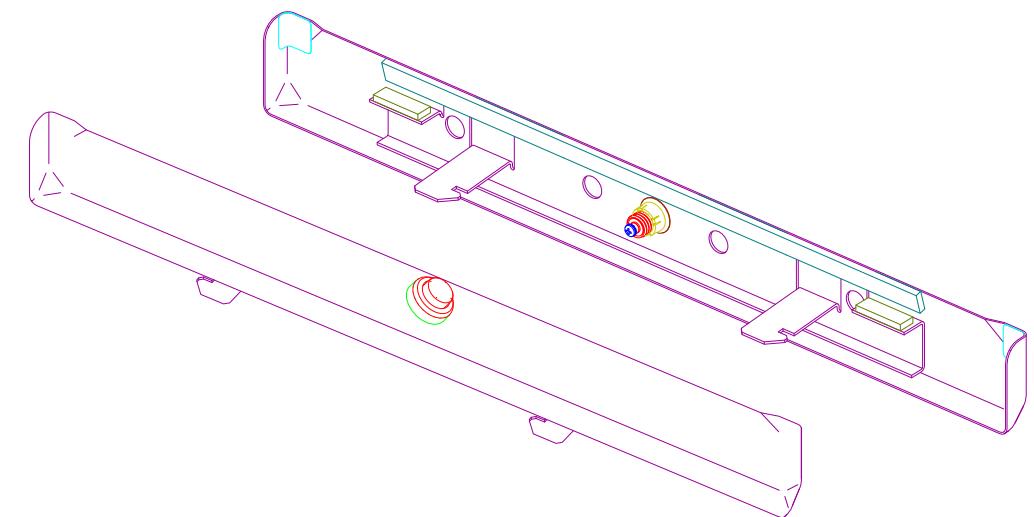
| Item | Part Number | Description | Qty |
|------|-----------------|---|-----|
| 1 | 10-000025-00 | Ball Shooter Cabinet Mtg Plate | 1 |
| 2 | 11-000007-00 | Shooter Rod, Black Ball | 1 |
| 3 | 13-007006-00 | Ball Shooter Outer Spring | 1 |
| 4 | 13-007007-07 | Ball Shooter Power Spring, Blue, 0.038" | 1 |
| 5 CE | 14-000001-19 | Ball Shooter Housing, Brass Bronze (-02) | 1 |
| LE | 14-000001-18 | Ball Shooter Housing, Black Texture (-01) | 1 |
| Std | 14-000001-08 | Ball Shooter Housing, Chrome (-00) | 1 |
| 6 | 25-009003-00 | Ball Shooter Tip, Black | 1 |
| 7 | 30-000021-00 | Ball Shooter Sleeve | 1 |
| 8 | 94-004001-06 | 3/8" Shaft E-Clip | 1 |
| 9 | 95-002564-58-16 | Flat Washer, 25/64" x 5/8" x 16ga | 3 |

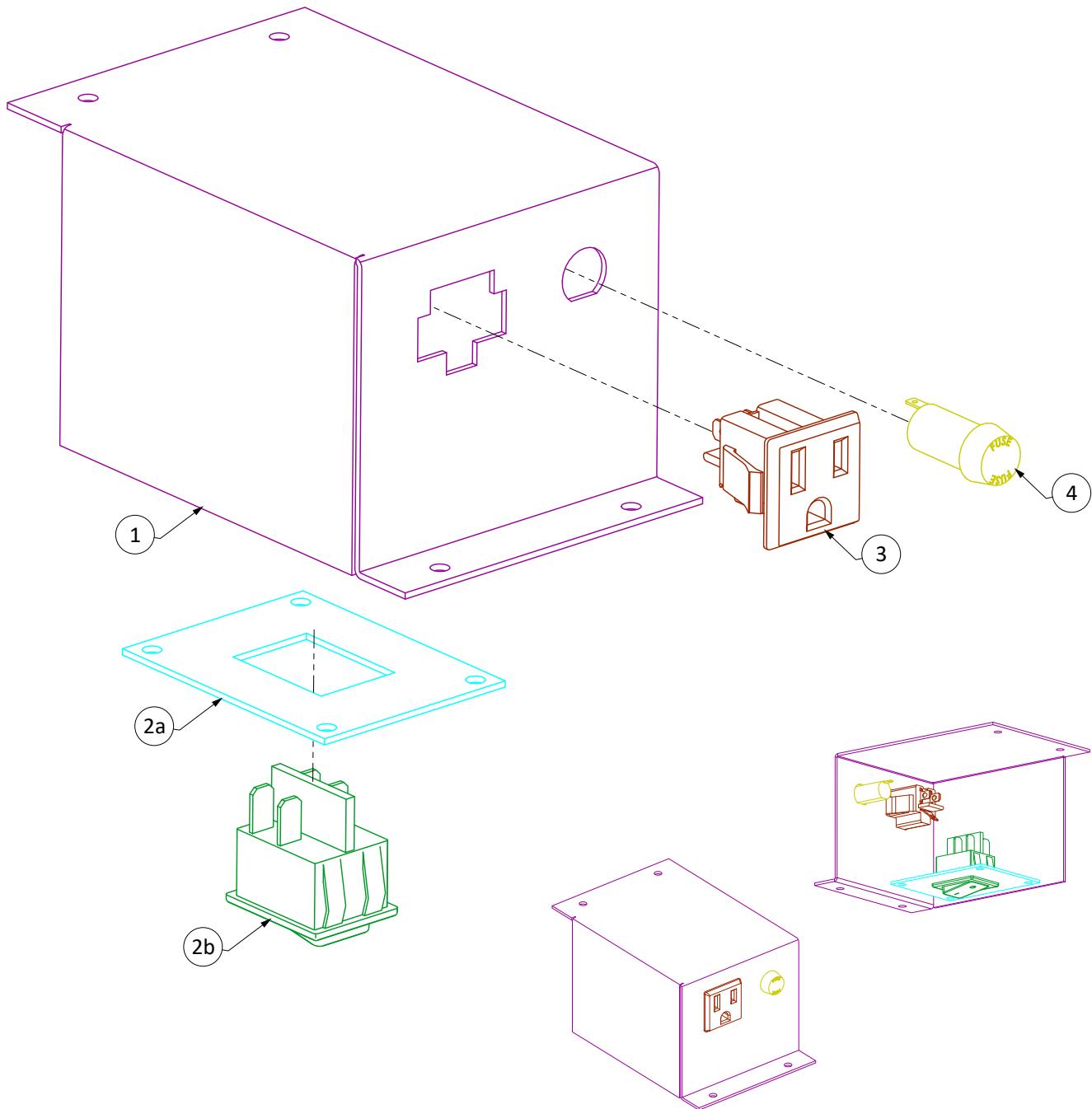
POTC Lockdown Bar Assemblies

51-000093-00 (Std), -01 (LE), -02 (CE)



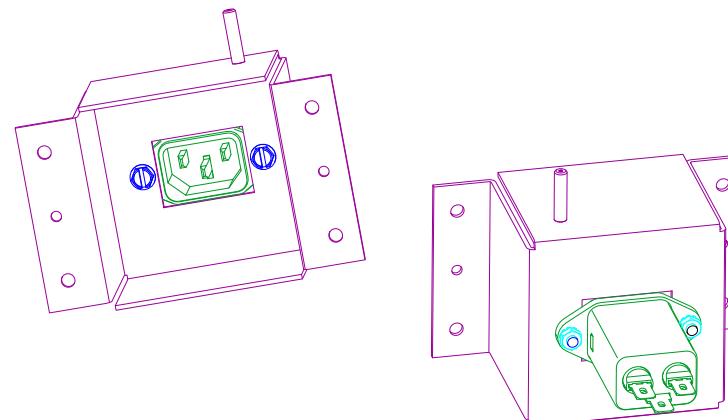
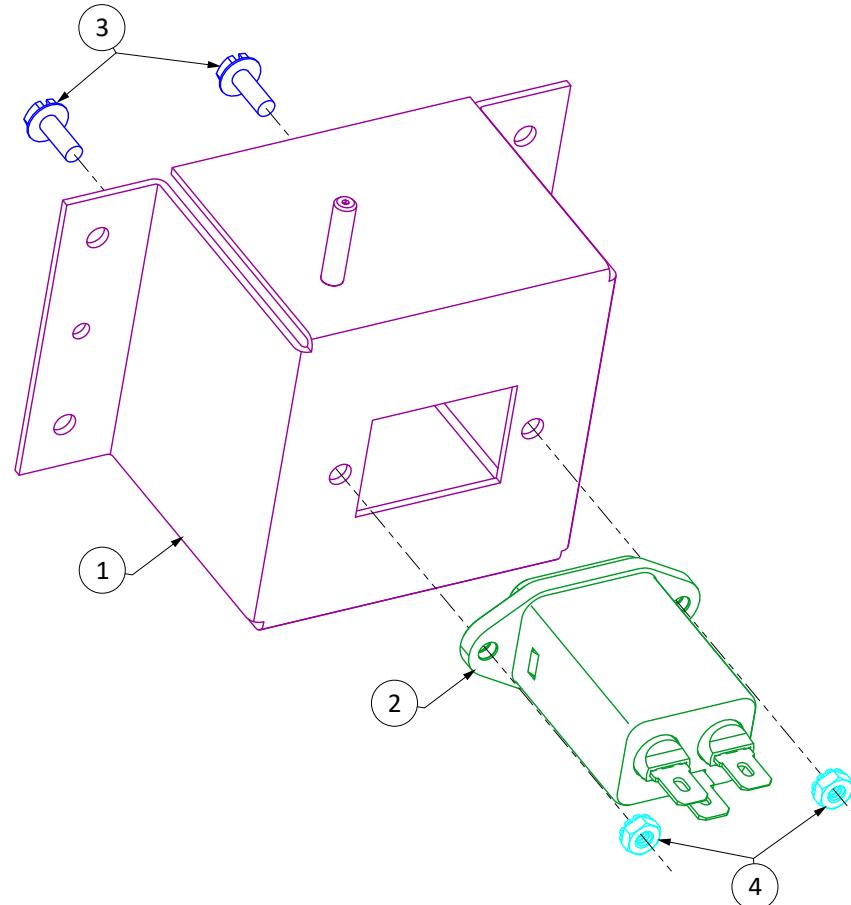
| Item | Part Number | Description | Qty |
|------|--|--|-------------|
| 1 | CE 10-000261-02 LE 10-000261-01 Std 10-000261-00 | Lockdown Bar, Wide, w/Button Hole, 11/17, Brass Bronze (-02) Lockdown Bar, Wide, w/Button Hole, 11/17, Black Texture (-01) Lockdown Bar, Wide, w/Button Hole, 11/17, Stainless (-00) | 1 1 1 |
| 2 | 30-000124-13 | Flipper Button, 1.375", Clear | 1 |
| 3 | 30-000126-00 | Action Button Spacer | 1 |
| CE | 32-000048-02 | POTC CE Lockdown Bar Barnacle Sculpture (-02) | 1 |
| CE | 61-009014-00 | Adhesive Tape, Two-Sided, White, 1/2" x 9mil (-02) | 4.8" |
| 4 | 61-009003-01 | Foam Adhesive Tape, Quick-Recovery, 1/2" x 3/16" | 4" |
| 5 | 61-009003-00 | Foam Adhesive Tape, Lockdown Bar Seal | 23" |
| 6 | 62-000041-13 | POTC Clear Mylar Siderail Protector | 2 |
| 7 | 80-001008-04 | 8-32 x 1/4" PPH MS, SEMS | 1 |
| 8 | 91-002563-06 | 5/8" x 3/8" Speed Nut | 1 |
| 9 | 94-100000-00 | Push Nut, 5/8" Shaft, Black | 1 |





Power Box Assembly, Front Outlet
51-005001-01

| Item | Part Number | Description | Qty |
|------|---------------|--|-----|
| 1 | 10-000008-01 | Cabinet Metal Power Box, Front Outlet | 1 |
| 2 | 18-007012-00 | On/Off Switch Assy | 1 |
| a) | 10-000087-00 | On/Off Switch Mtg Brkt | 1 |
| b) | 18-003006-00 | On/Off Switch, Rocker Style | 1 |
| 3 | 22-000001-00 | USA Service Outlet, Snap-In | 1 |
| 4 | 22-008000-00 | Line Fuse Holder | 1 |
| USA | 170-000110-SR | Fuse, Slow Blow, 10A, 125V, 0.25" x 1.25", 3AG | 1 |
| Euro | 170-000205-SR | Fuse, Slow Blow, 5A, 250V, 0.25" x 1.25", 3AG | 1 |
| NS | 180-000000-00 | Varistor, USA | 1 |
| NS | 180-000002-00 | Varistor, Europe | 1 |
| NS | 180-000001-00 | Thermistor, USA | 1 |
| NS | 180-000003-00 | Thermistor, Europe | 1 |

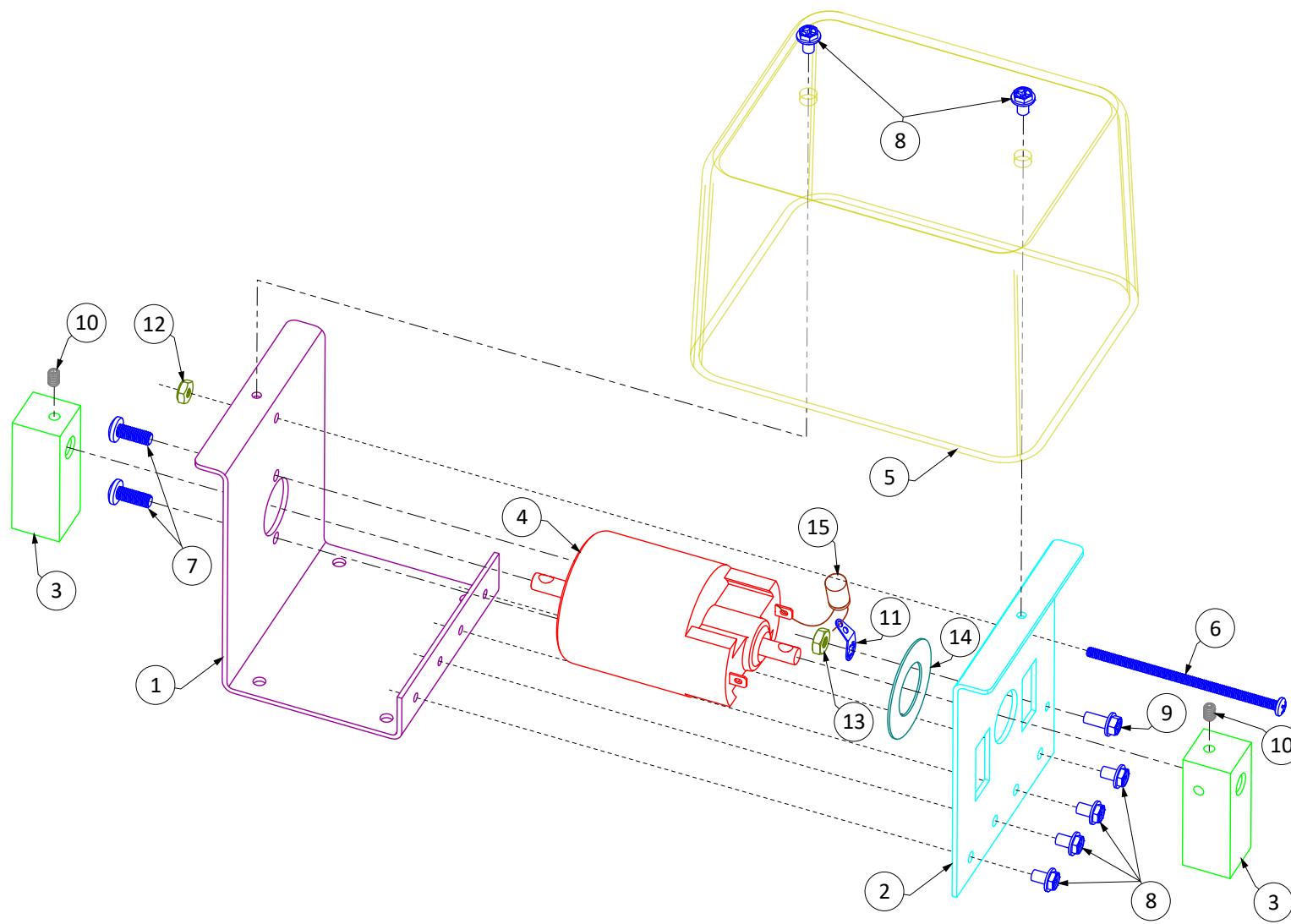


Line Filter Box Assembly
51-005023-00

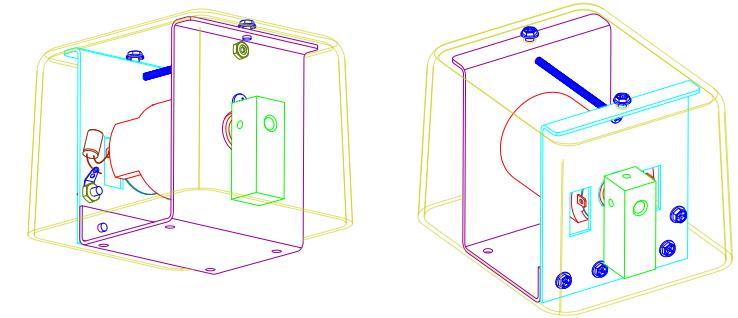
| Item | Part Number | Description | Qty |
|------|--------------|---------------------------------------|-----|
| 1 | 10-000009-00 | Line Filter Mtg Brkt | 1 |
| 2 | 22-000000-00 | Line Filter | 1 |
| 3 | 80-002006-06 | 6-32 x 3/8" HWH Phillips MS, Serrated | 2 |
| 4 | 91-001006-00 | 6-32 Keps Nut | 2 |
| NS | 91-001008-00 | 8-32 Keps Nut | 2 |

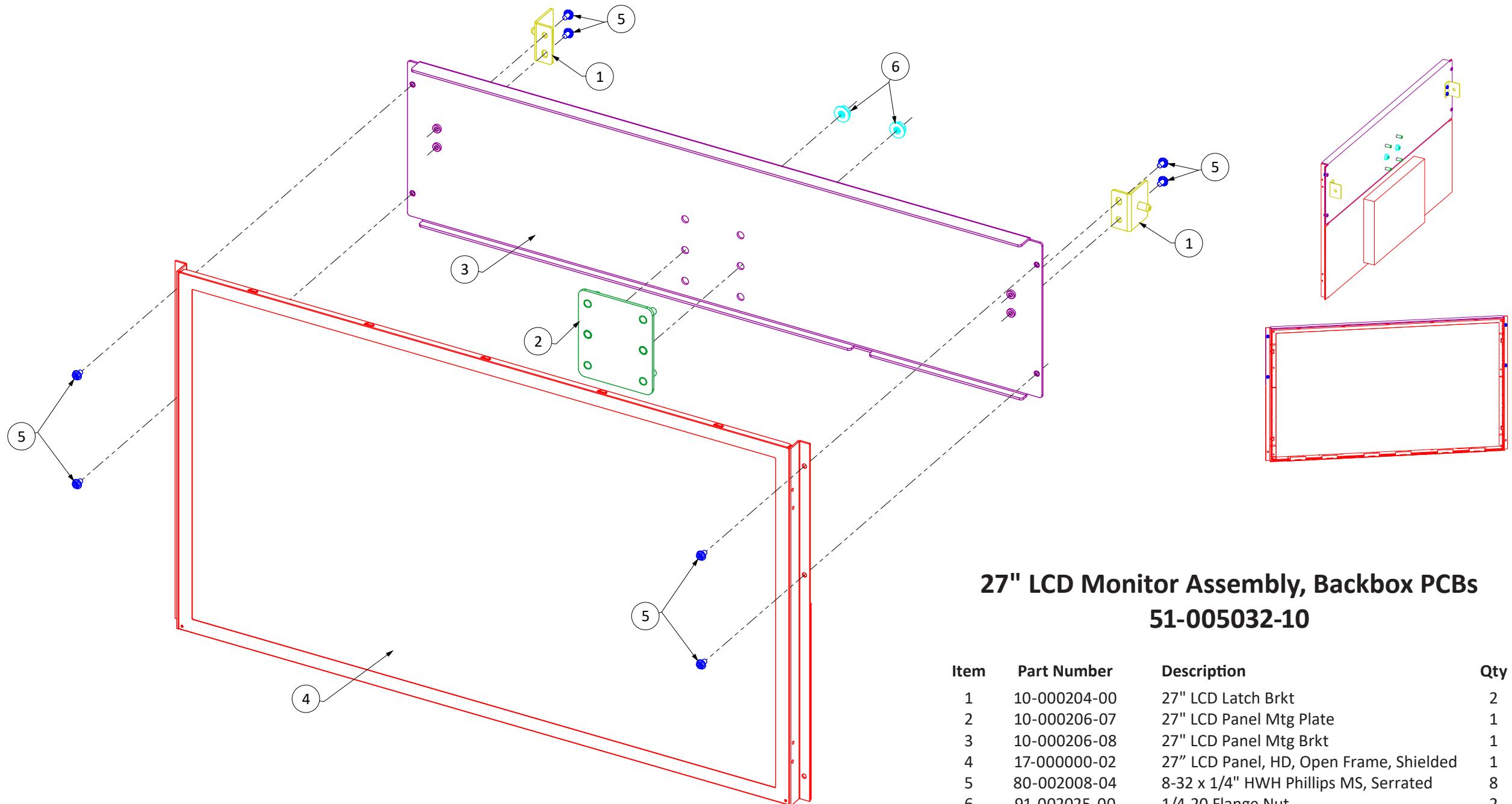
Shaker Motor Assembly

51-005027-01



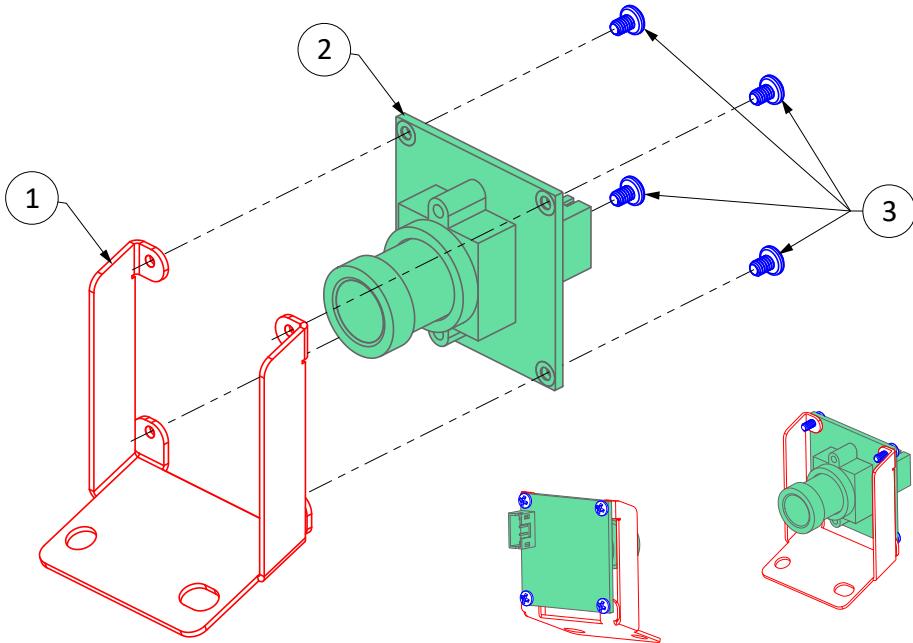
| Item | Part Number | Description | Qty |
|------|----------------|--|-----|
| 1 | 10-005006-02 | Shaker Motor Mtg Brkt | 1 |
| 2 | 10-005006-03 | Shaker Motor Front Brkt | 1 |
| 3 | 11-000010-00 | Eccentric Weight | 2 |
| 4 | 23-005003-01 | Shaker Motor | 1 |
| 5 | 30-000011-00 | Shaker Motor Plastic Cover, White | 1 |
| 6 | 80-000006-48 | 6-32 x 3" PPH MS | 1 |
| 7 | 80-000010-08 | 10-32 x 1/2" PPH MS | 2 |
| 8 | 80-002008-04 | 8-32 x 1/4" HWH Phillips MS, Serrated | 6 |
| 9 | 80-002008-06 | 8-32 x 3/8" HWH Phillips MS, Serrated | 1 |
| 10 | 85-004008-04 | 8-32 x 1/4" Set Screw, Black | 2 |
| 11 | 90-000007-00 | #8 Terminal Lockwasher, Angled | 1 |
| 12 | 91-000006-00 | 6-32 Nylon Stop Nut | 1 |
| 13 | 91-002008-00 | 8-32 Hex Nut | 1 |
| 14 | 95-004000-00 | Insulator Washer | 1 |
| 15 | 109-00100M-050 | Capacitor, Elect (Radial), 100μF, 50V, 20% | 1 |





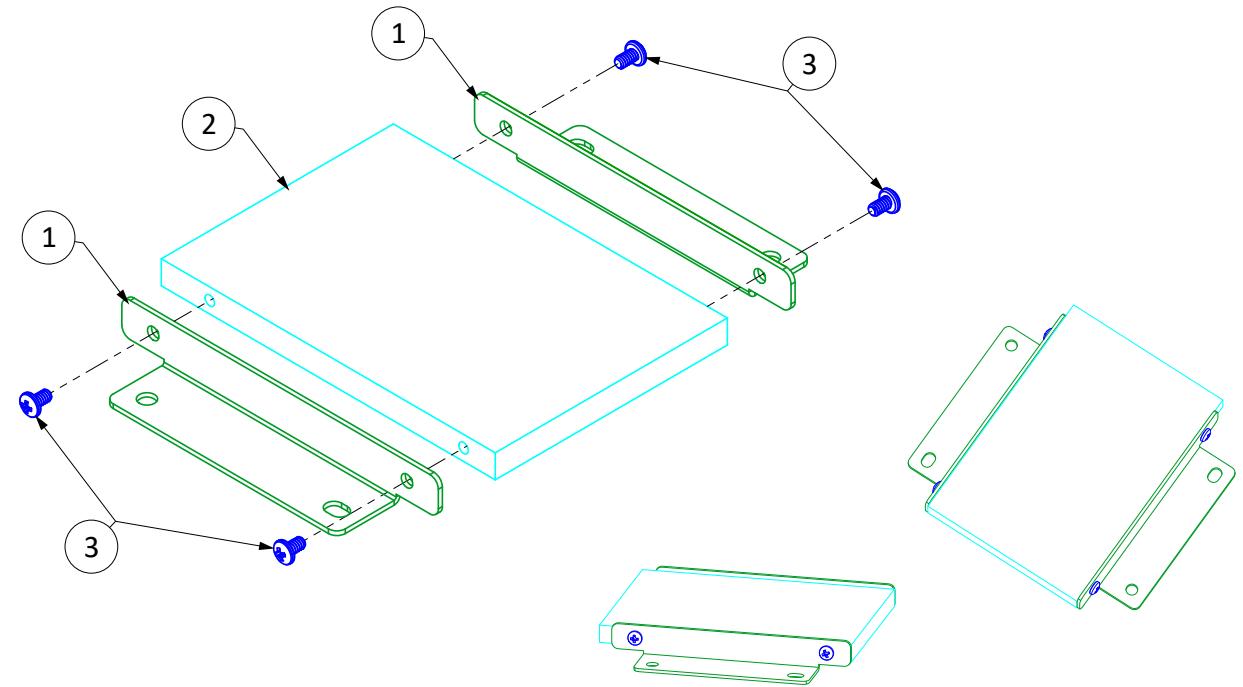
27" LCD Monitor Assembly, Backbox PCBs
51-005032-10

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000204-00 | 27" LCD Latch Brkt | 2 |
| 2 | 10-000206-07 | 27" LCD Panel Mtg Plate | 1 |
| 3 | 10-000206-08 | 27" LCD Panel Mtg Brkt | 1 |
| 4 | 17-000000-02 | 27" LCD Panel, HD, Open Frame, Shielded | 1 |
| 5 | 80-002008-04 | 8-32 x 1/4" HWH Phillips MS, Serrated | 8 |
| 6 | 91-002025-00 | 1/4-20 Flange Nut | 2 |



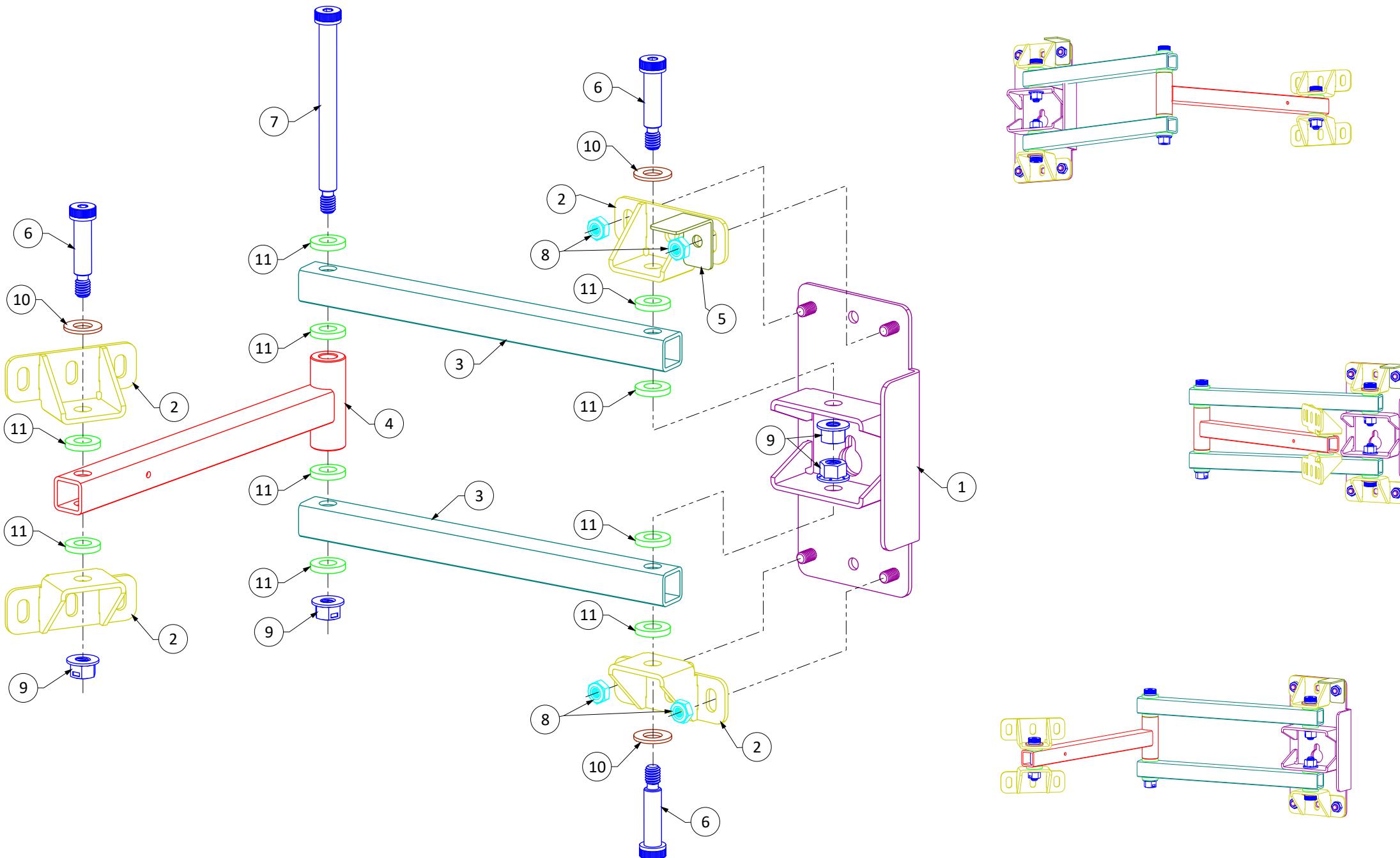
USB Camera Assembly
51-005041-00

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 10-000226-00 | USB Camera Mtg Brkt | 1 |
| 2 | 15-005034-00 | USB Camera Module, 1MP, 720P, 3.6mm Lens | 1 |
| 3 | 80-000002-04 | 2-56 x 1/4" PPH MS | 4 |



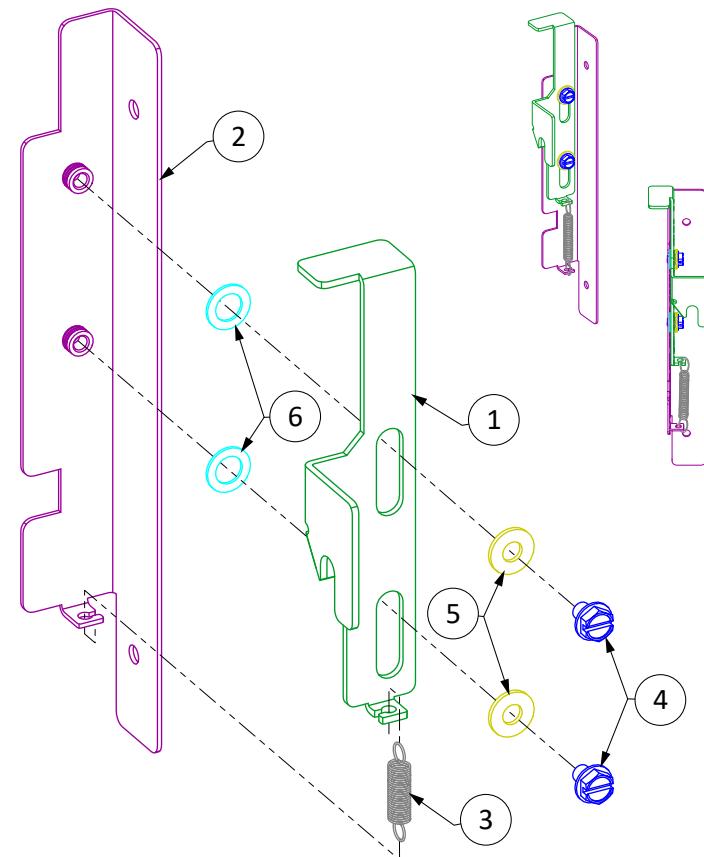
Backbox Mount Solid State Drive Assembly, 60GB
51-005044-02

| Item | Part Number | Description | Qty |
|------|--------------|----------------------------|-----|
| 1 | 10-000209-00 | Solid State Drive Mtg Brkt | 2 |
| 2 | 15-000003-02 | Solid State Drive, 60GB | 1 |
| 3 | 80-000004-03 | 4-40 x 3/16" PPH MS | 4 |



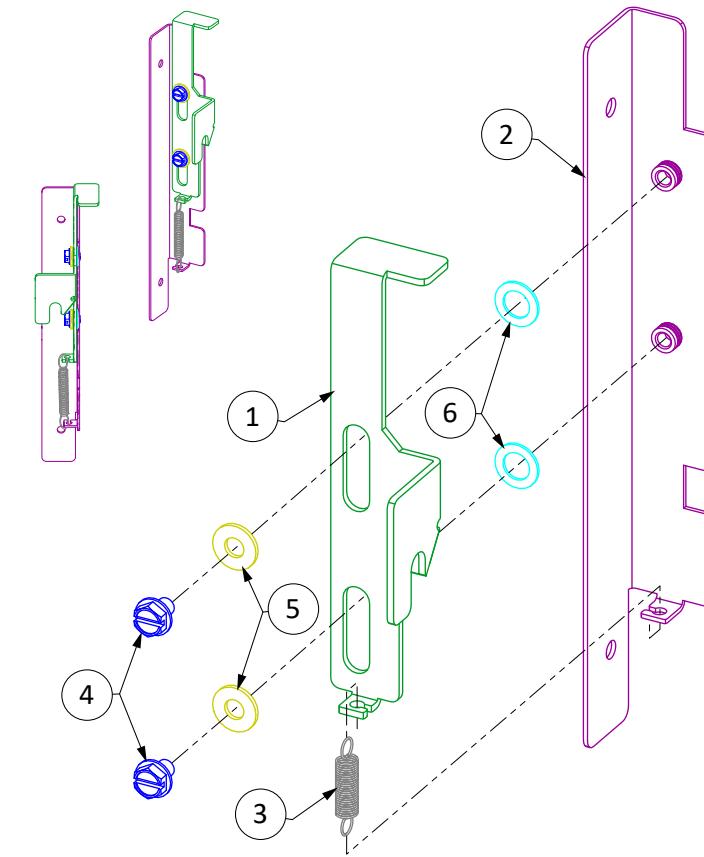
27" LCD Pivot/Swing Assembly
51-005043-00

| Item | Part Number | Description | Qty |
|-------------|--------------------|---|------------|
| 1 | 10-000206-00 | 27" LCD Pivot Backbox Main Plate Weldment | 1 |
| 2 | 10-000206-02 | 27" LCD Swivel Brkt | 4 |
| 3 | 10-000206-03 | 27" LCD Pivot/Swing Extension, 9.25" | 2 |
| 4 | 10-000206-04 | 27" LCD Swing Arm | 1 |
| 5 | 10-000236-02 | Backbox PCBs EMI Shield Support Brkt | 1 |
| 6 | 85-000516-20 | 5/16-18 x 3/8" x 1-1/4" SH Shoulder Bolt | 3 |
| 7 | 85-000516-64 | 5/16-18 x 3/8" x 4" SH Shoulder Bolt | 1 |
| 8 | 91-000025-01 | 1/4-20 Nylon Stop Nut | 4 |
| 9 | 91-006516-00 | 5/16-18 Distorted-Thread Locknut, Flanged | 4 |
| 10 | 92-000038-01 | 3/8" Flat Washer, 0.406" ID, 0.812" OD, 0.065" TH | 3 |
| 11 | 96-001001-00 | Thrust Bearing, Oil-Embedded, 3/8" Shaft, 1/8" TH | 10 |



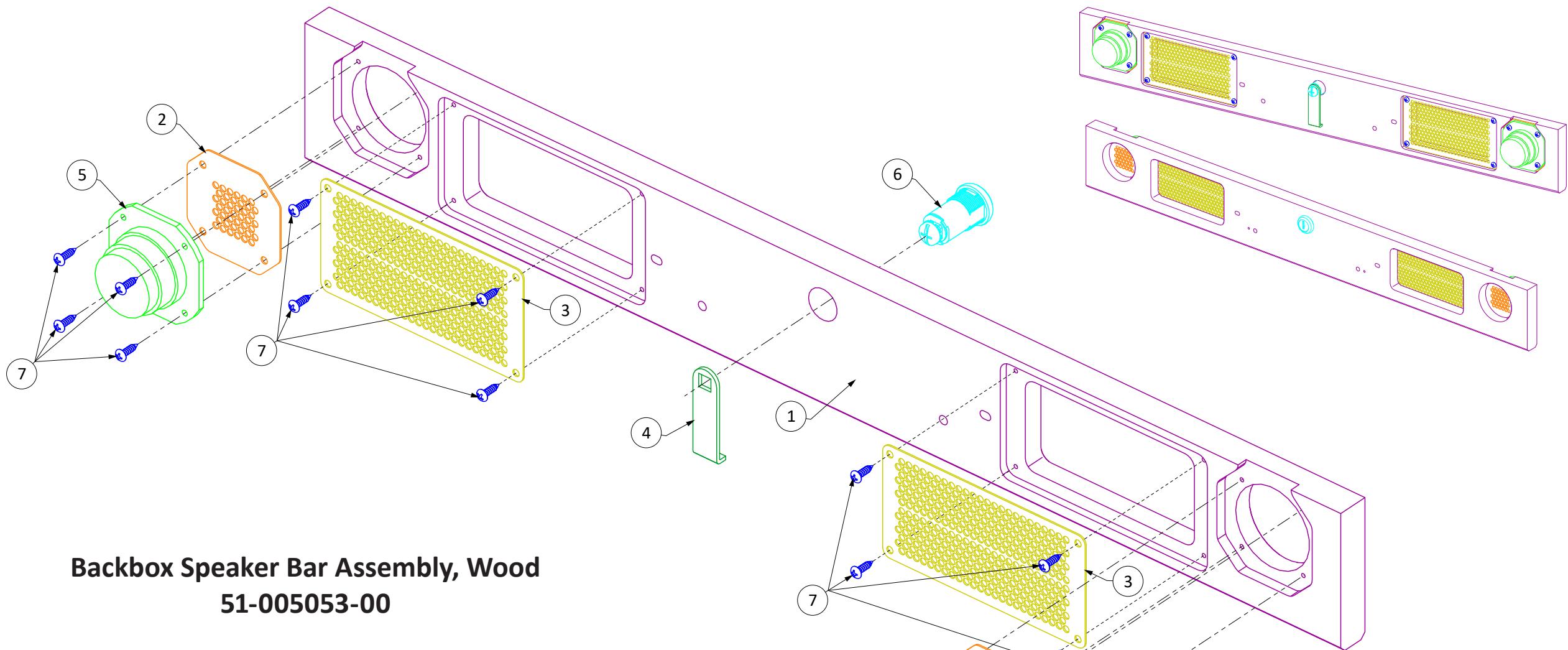
27" LCD Lock/Latch Brkt Assembly, Left
10-008003-00

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000202-00 | 27" LCD Lock Brkt, Left | 1 |
| 2 | 10-000203-00 | 27" LCD Lock Mtg Brkt, Left | 1 |
| 3 | 13-007013-00 | Single Door Extension Spring | 1 |
| 4 | 80-002010-04 | 10-32 x 1/4" HWH Phillips MS, Serrated | 2 |
| 5 | 92-000010-00 | #10 Flat Washer, 0.226" ID, 0.507" OD | 2 |
| 6 | 92-000625-00 | Nylon Washer, 0.312" ID, 0.5" OD, 0.031" TH | 2 |



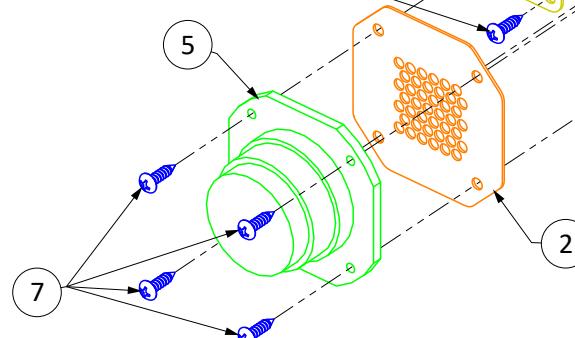
27" LCD Lock/Latch Brkt Assembly, Right
10-008003-01

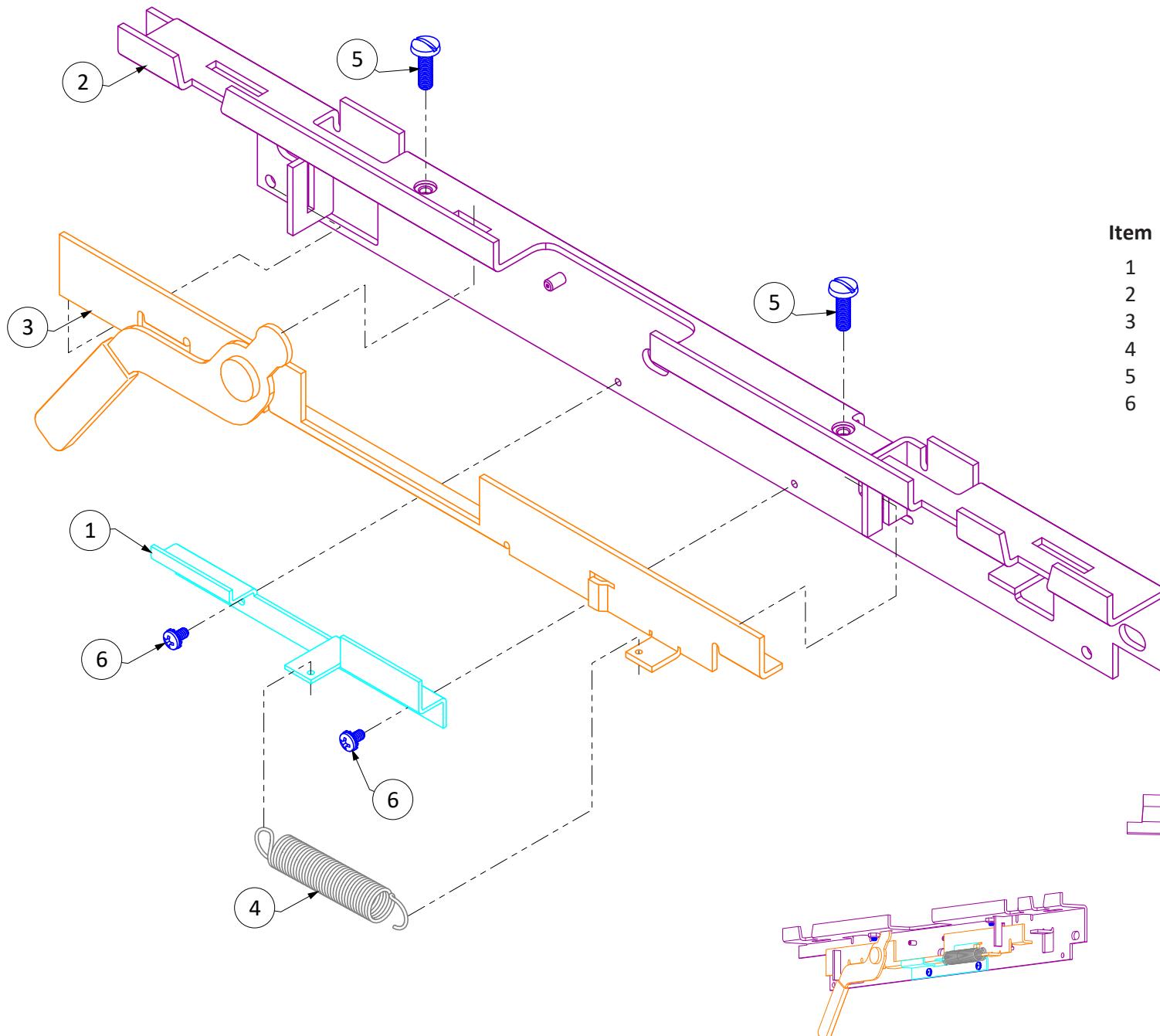
| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000202-01 | 27" LCD Lock Brkt, Right | 1 |
| 2 | 10-000203-01 | 27" LCD Lock Mtg Brkt, Right | 1 |
| 3 | 13-007013-00 | Single Door Extension Spring | 1 |
| 4 | 80-002010-04 | 10-32 x 1/4" HWH Phillips MS, Serrated | 2 |
| 5 | 92-000010-00 | #10 Flat Washer, 0.226" ID, 0.507" OD | 2 |
| 6 | 92-000625-00 | Nylon Washer, 0.312" ID, 0.5" OD, 0.031" TH | 2 |



Backbox Speaker Bar Assembly, Wood
51-005053-00

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 05-003033-08 | Backbox Speaker Bar Front Panel | 1 |
| 2 | 10-000002-10 | Backbox Speaker Grill, 2.4" x 2.4" | 2 |
| 3 | 10-000002-11 | Backbox Speaker Grill, 2.7" x 5.3" | 2 |
| 4 | 10-000224-00 | Backbox Lock Cam, Wooden Speaker Bar | 1 |
| 5 | 17-006000-00 | 2" Mylar Dome Tweeter Speaker | 2 |
| 6 | 51-005012-02 | Backbox Lock Assy, 1-1/8", 1-1/4" Cam | 1 |
| 7 | 82-000106-08 | #6 x 1/2" PPH SMS, Black | 16 |
| NS | 108-008K-100 | Capacitor, Elect (Axial), 8μF, 100V, 10% | 2 |

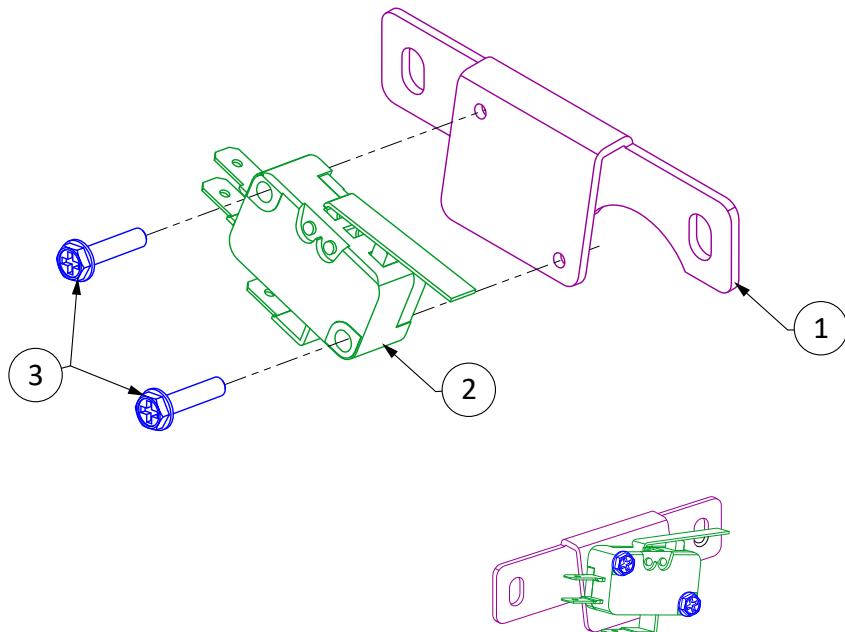




Lockdown Bar Receiver Assembly, Notched

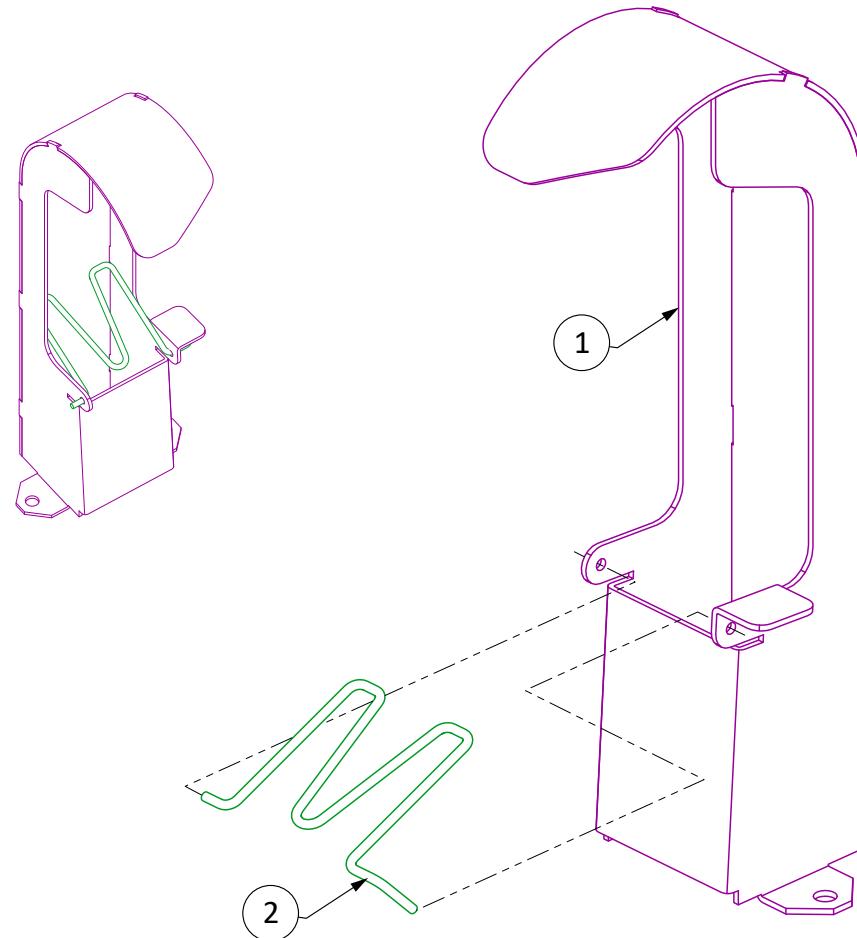
10-008001-00

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 10-000157-00 | Lockdown Bar Receiver Slide Support, Notched | 1 |
| 2 | 10-005029-00 | Lockdown Bar Receiver Brkt Assy, Notched | 1 |
| 3 | 10-005030-00 | Lockdown Bar Receiver Lever Assy, Notched | 1 |
| 4 | 13-007017-00 | Lockdown Bar Receiver Spring | 1 |
| 5 | 80-000310-10 | 10-32 x 5/8" Slot Head MS, Brass | 2 |
| 6 | 80-001006-04 | 6-32 x 1/4" PPH MS, SEMS | 2 |



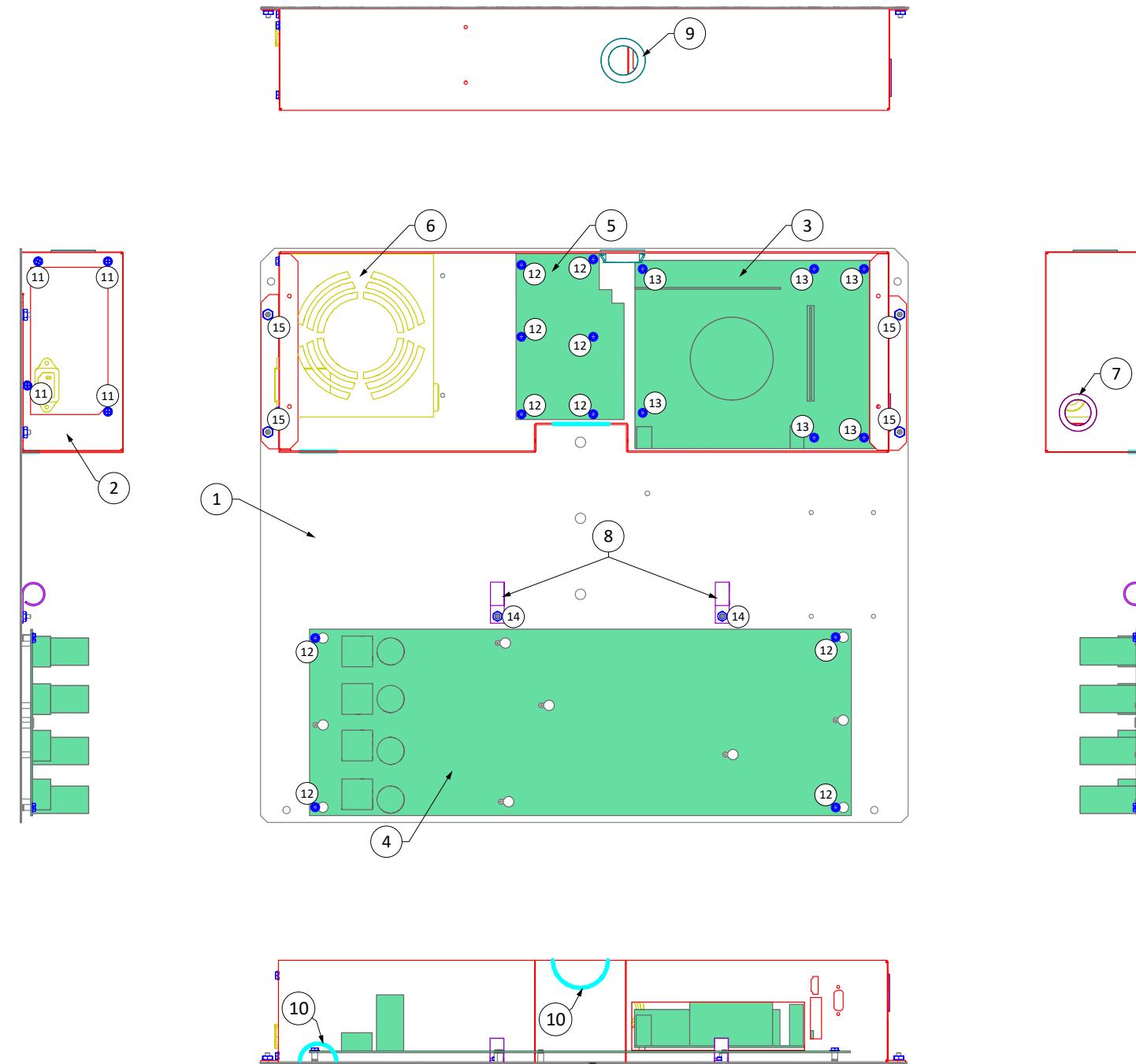
Lockdown Bar Switch Assembly, 11/17
51-000066-10

| Item | Part Number | Description | Qty |
|------|--------------|---------------------------------------|-----|
| 1 | 10-000167-10 | Lockdown Bar Switch Brkt, 11/17 | 1 |
| 2 | 18-003015-00 | Mini Switch w/Straight Blade Actuator | 1 |
| 3 | 80-002104-08 | 4-40 x 1/2" HWH MS, Black | 2 |



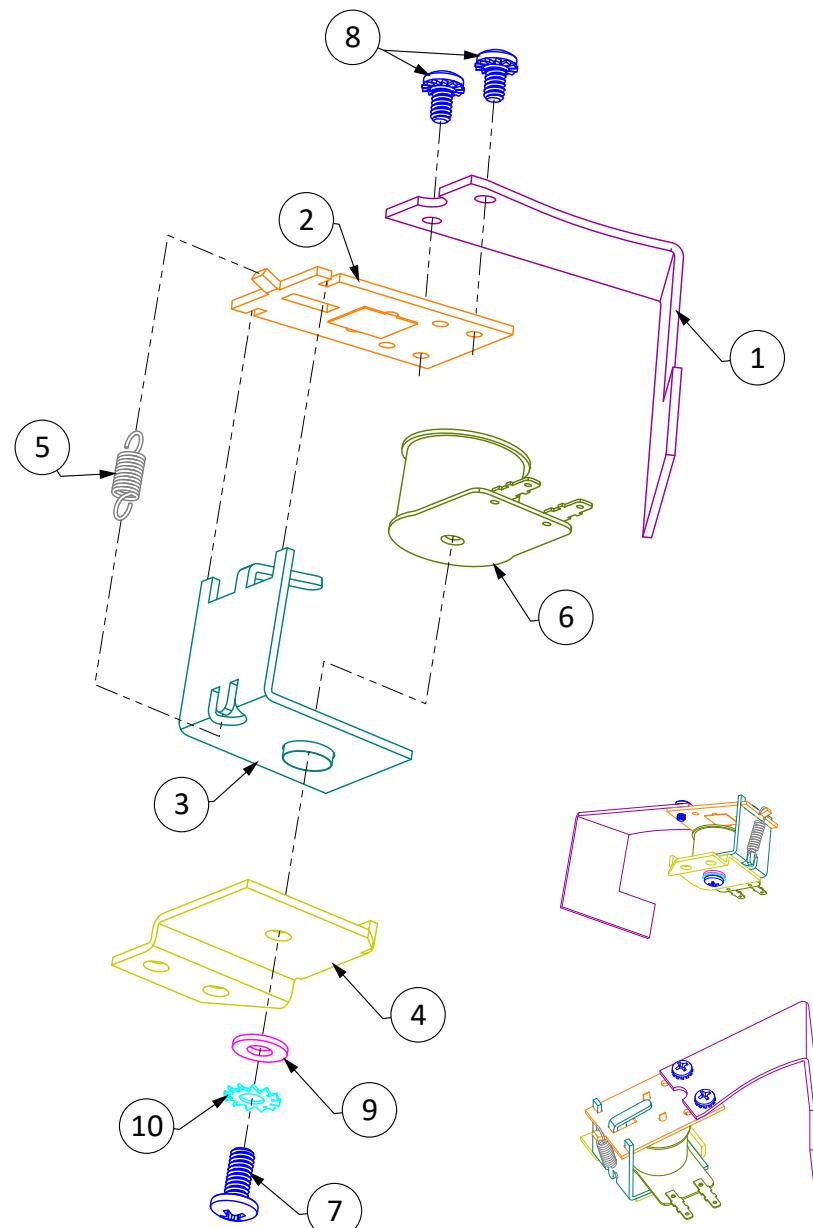
POTC VUK Chute & Gate Assembly
52-000084-00

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000239-00 | POTC Black Pearl Access VUK Chute Weldment | 1 |
| 2 | 13-003022-20 | POTC Black Pearl Access VUK One Way Gate Wireform | 1 |



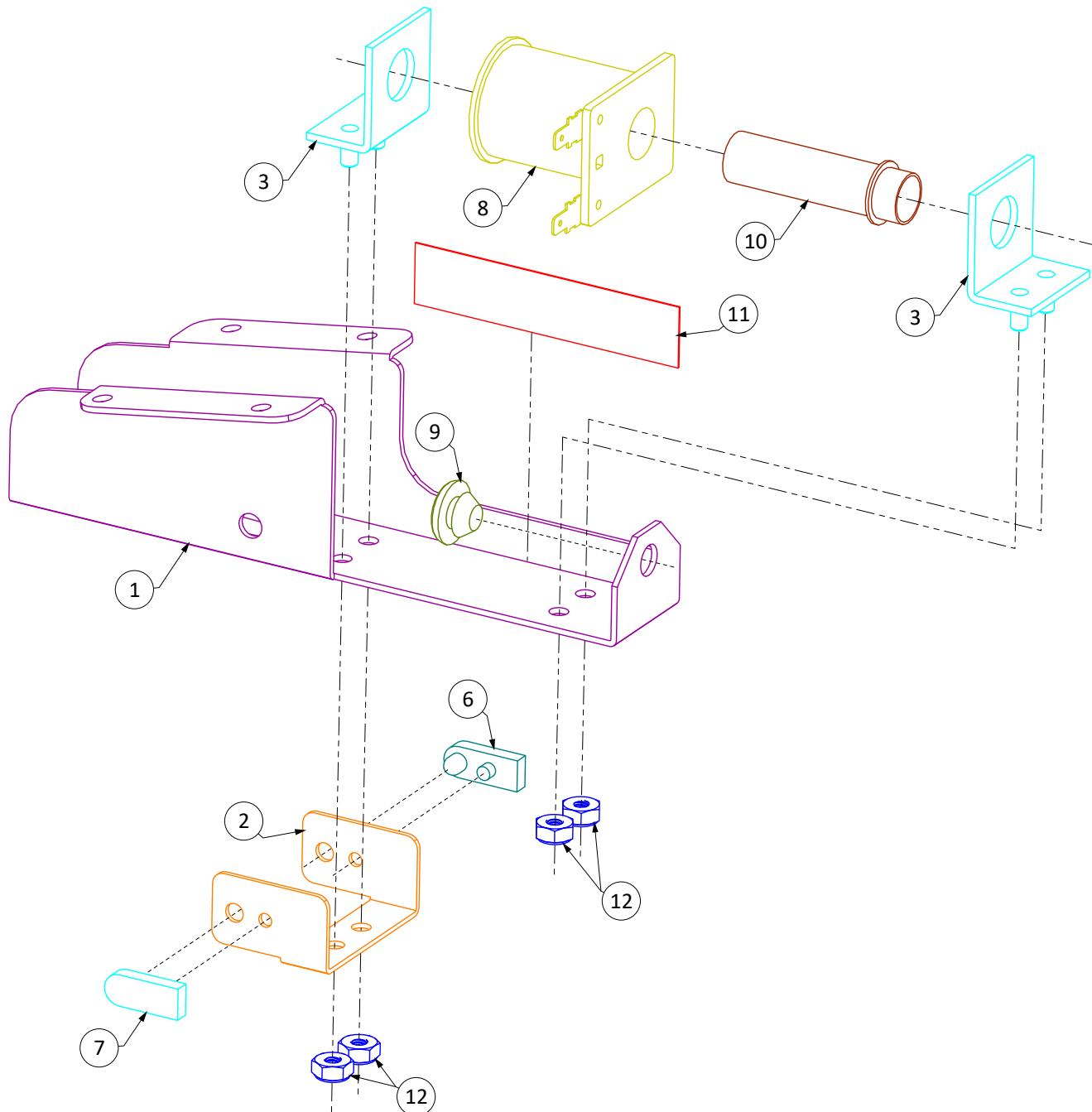
Backbox Mount PCB Assembly, 11/17
51-005045-01

| Item | Part Number | Description | Qty |
|-------------|--------------------|--|------------|
| 1 | 10-000208-00 | Backbox PCB PEM Plate | 1 |
| 2 | 10-000236-00 | Backbox PCBs EMI Shield Enclosure | 1 |
| 3 | 15-000000-03 | CPU Bd, GA-H110M-S2H-GSM | 1 |
| | 15-000012-03 | 4GB DDR4-2400 SDRAM Module, 288-Pin | 1 |
| | 15-000014-01 | Intel Celeron Processor G3930 | 1 |
| | 15-000061-00 | POTC Game Security Dongle | 1 |
| 4 | 15-004001-01 | I/O PCB Assy, All Drives Populated | 1 |
| 5 | 15-004002-01 | Sound Amplifier PCB Assy, Analog In | 1 |
| 6 | 16-000013-00 | ATX Power Supply, 80 Plus Bronze, 450W | 1 |
| 7 | 25-009013-00 | PCB Chassis CPU Grommet, 1" | 1 |
| 8 | 30-000049-12 | Nylon Cable Clamp, Open, 3/4" | 2 |
| 9 | 30-000108-02 | Locking Grommet, 1-1/2" | 1 |
| 10 | 30-008005-00 | Plastic Edge Trim w/Adhesive | 7" |
| 11 | 80-001006-04 | 6-32 x 1/4" PPH MS, SEMS | 4 |
| 12 | 80-002006-06 | 6-32 x 3/8" HWH Phillips MS, Serrated | 10 |
| 13 | 80-002006-08 | 6-32 x 1/2" HWH Phillips MS, Serrated | 6 |
| 14 | 91-000006-00 | 6-32 Nylon Stop Nut | 2 |
| 15 | 91-001008-00 | 8-32 Keps Nut | 4 |



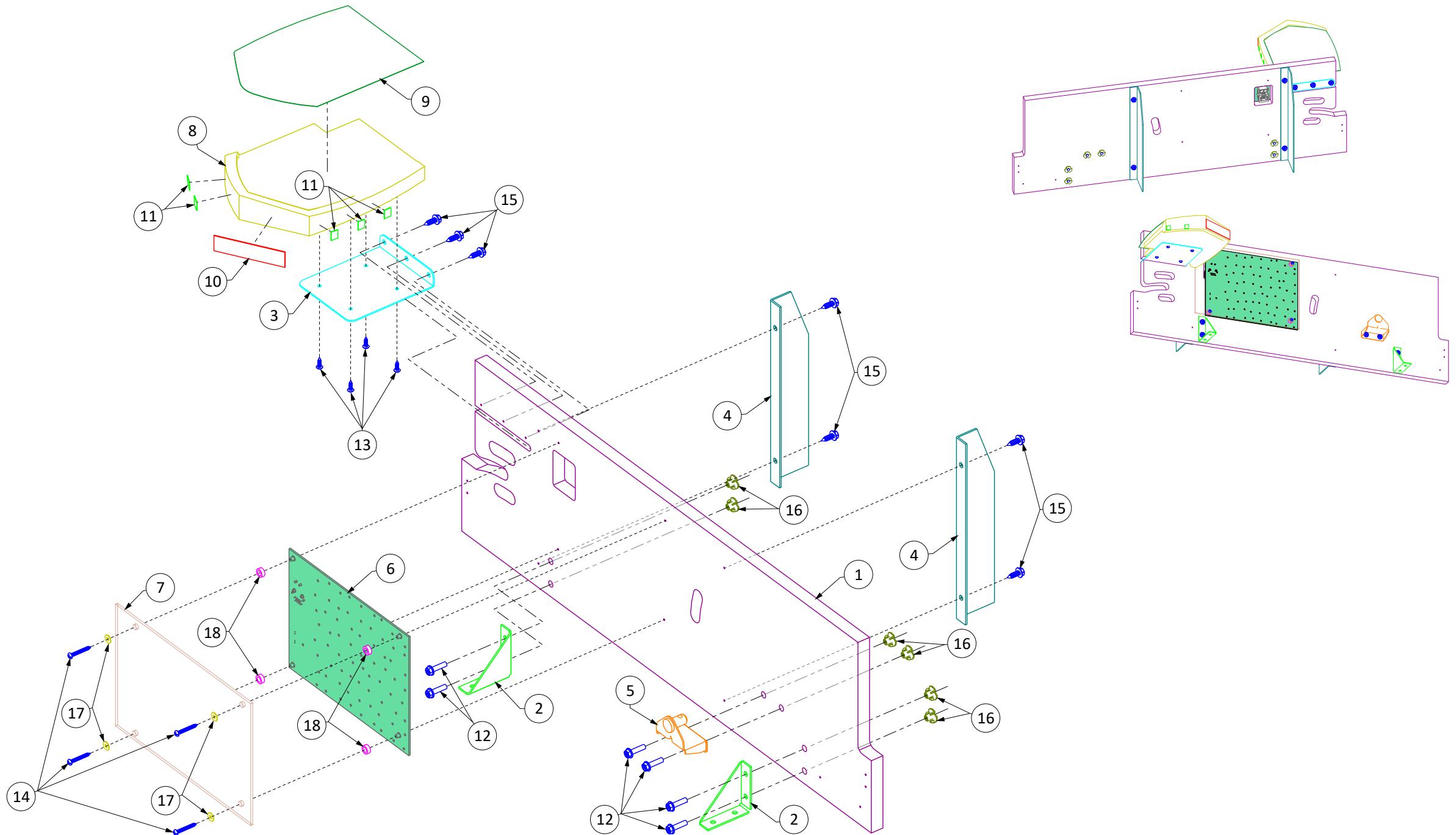
POTC Left Turnaround Loop Diverter Assembly
51-005051-00

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 10-000064-04 | POTC Left Turnaround Loop Diverter Arm | 1 |
| 2 | 10-000213-06 | Trap Door Latch Coil Armature | 1 |
| 3 | 10-000213-09 | Trap Door Latch Trip Coil Frame & Eyelet Assy | 1 |
| 4 | 10-000251-02 | POTC Left Turnaround Loop Diverter Mtg Brkt | 1 |
| 5 | 13-007029-18 | Mini Coil Spring, 18oz Tension | 1 |
| 6 | 23-003008-01 | 26-600 Mini Coil Assy, 0.313" Core | 1 |
| 7 | 80-000308-06 | 8-32 x 3/8" PPH MS, Brass | 1 |
| 8 | 80-001006-04 | 6-32 x 1/4" PPH MS, SEMS | 2 |
| 9 | 92-000308-00 | #8 Flat Washer, 0.172" ID, 0.375" OD, Brass | 1 |
| 10 | 92-003108-00 | #8 Ext-Tooth Lock Washer, 0.168" ID, 0.381" OD | 1 |



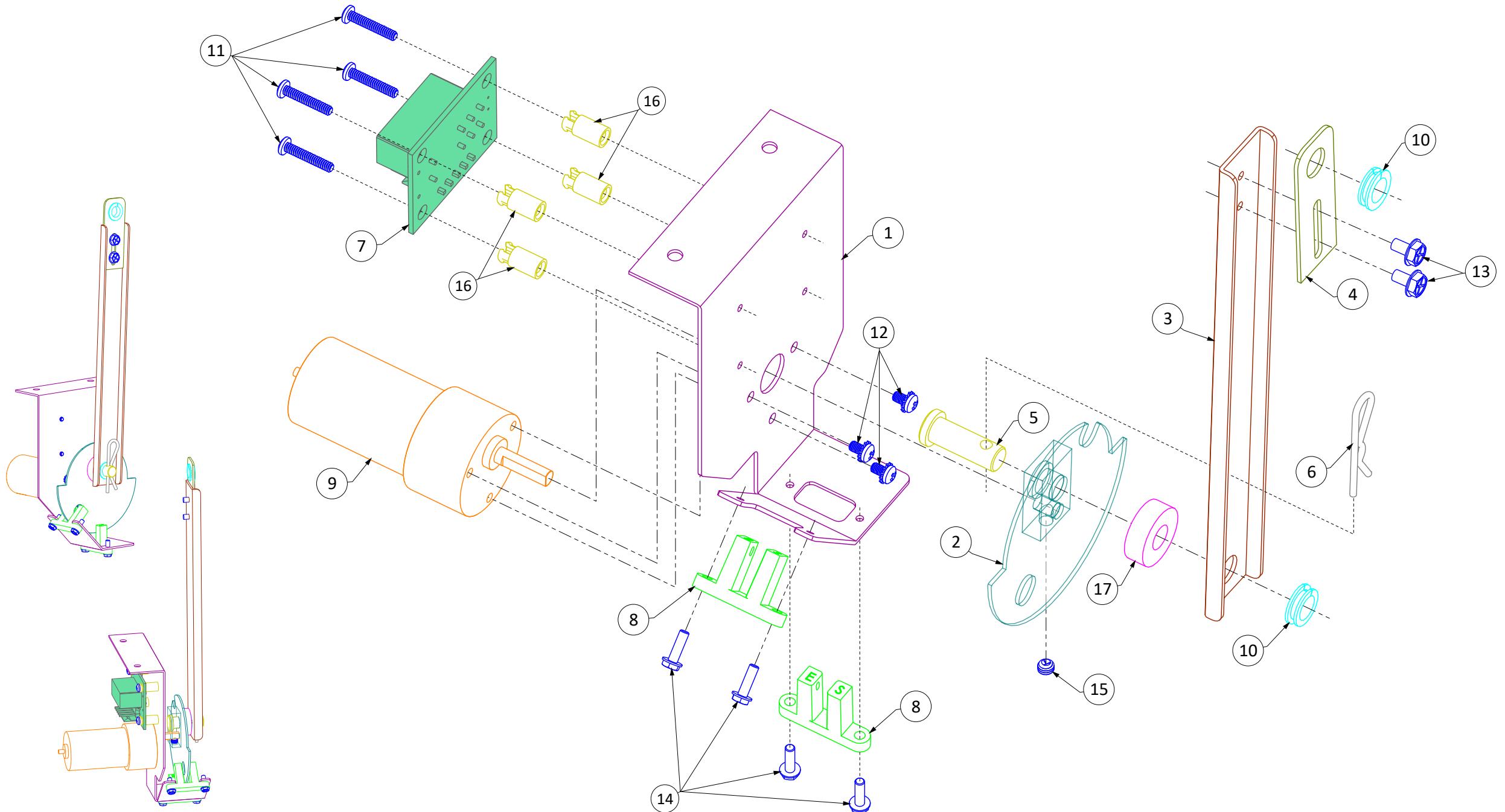
POTC Black Pearl PF Cannon Assembly
52-000069-00

| Item | Part Number | Description | Qty |
|------|----------------|--|-----|
| 1 | 10-000237-00 | POTC Cannon Brkt | 1 |
| 2 | 10-000237-01 | POTC Cannon Opto Brkt | 1 |
| 3 | 10-007004-00 | Coil Centering Brkt, 5/8", 1/2" Mnts, 8-32 Studs | 2 |
| 4 | 11-005001-00 | VUK Armature Plunger Assy | 1 |
| 5 | 13-007005-00 | VUK Plunger Return Spring | 1 |
| 6 | 18-005001-00 | Infrared LED Assy | 1 |
| 7 | 18-005001-01 | Phototransistor Assy | 1 |
| 8 | 23-000003-00 | 23-800 Standard Coil | 1 |
| 9 | 25-009001-00 | Rubber Bumper Plug, Black | 1 |
| 10 | 30-000014-30-1 | 1-7/8" Coil Tubing, Flanged | 1 |
| 11 | 70-100001-00 | Coil Insulator, Cannon Brkt | 1 |
| 12 | 91-000008-00 | 8-32 Nylon Stop Nut | 4 |



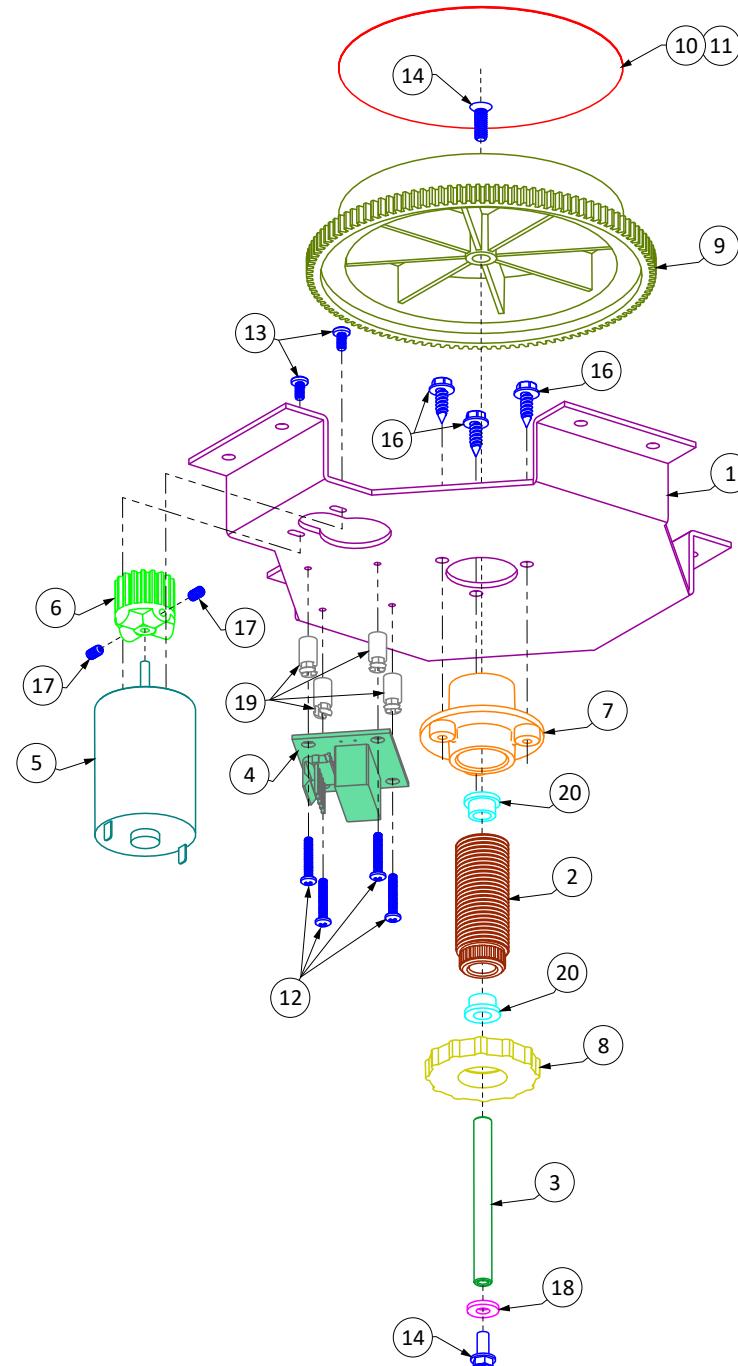
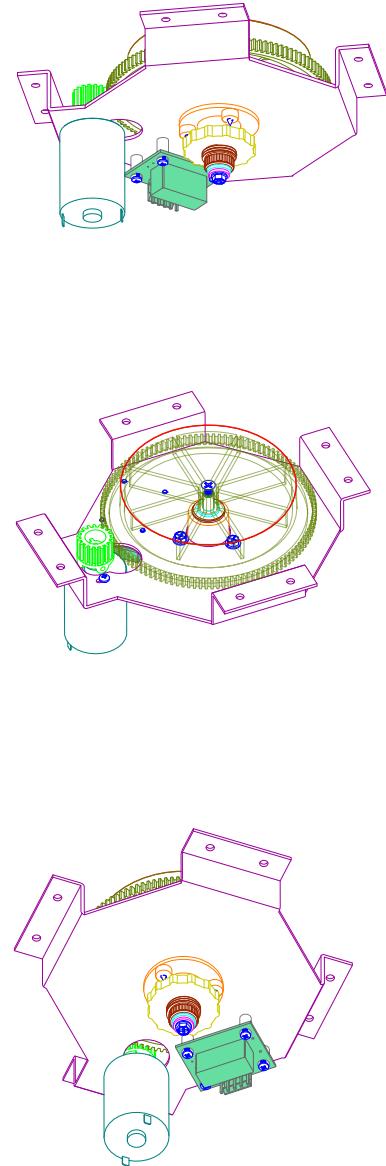
POTC Back Panel Assemblies
52-000063-00 (CE/LE), 52-000063-01 (Std)

| Item | Part Number | Description | Qty |
|-------------|--------------------|--|------------|
| 1 | 05-009006-00 | POTC Back Panel Wood | 1 |
| 2 | 10-000162-00 | Back Panel Support Brkt | 2 |
| 3 | 10-000258-00 | POTC Tgt Ship Top Deck Mtg Brkt | 1 |
| 4 | 10-000279-20 | POTC Back Panel Assy Protect Brkt | 2 |
| 5 | 10-005041-00 | Mini PF Pivot Brkt Weldment, Back Panel | 1 |
| 6 CE/LE | 15-000060-00 | POTC Back Panel Starfield Bd (-00) | 1 |
| 7 | 30-003013-27 | POTC Back Panel Starfield Cover Plastic | 1 |
| 8 | 32-000043-10 | POTC Tgt Ship Top Deck Sculpture | 1 |
| 9 | 62-000038-35 | POTC Tgt Ship Top Deck Decal | 1 |
| 10 | 62-000038-36 | POTC Tgt Ship Union Jack Decal | 1 |
| 11 | 62-000038-37 | POTC Tgt Ship Cannon Port Decal | 5 |
| 12 | 80-002008-10 | 8-32 x 5/8" HWH Phillips MS, Serrated | 6 |
| 13 | 82-000004-06 | #4 x 3/8" PPH SMS | 4 |
| 14 | 82-000004-14 | #4 x 7/8" PPH SMS | 4 |
| 15 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 7 |
| 16 | 91-004008-00 | 8-32 x 1/4" T-Nut, 1/2" Flange | 6 |
| 17 | 92-000004-00 | #4 Flat Washer | 4 |
| 18 | 94-005310-04 | #10 x 1/8" Round Spacer, 5/16" OD, Nylon | 4 |



POTC Black Pearl PF Rocker Assembly
52-000068-00

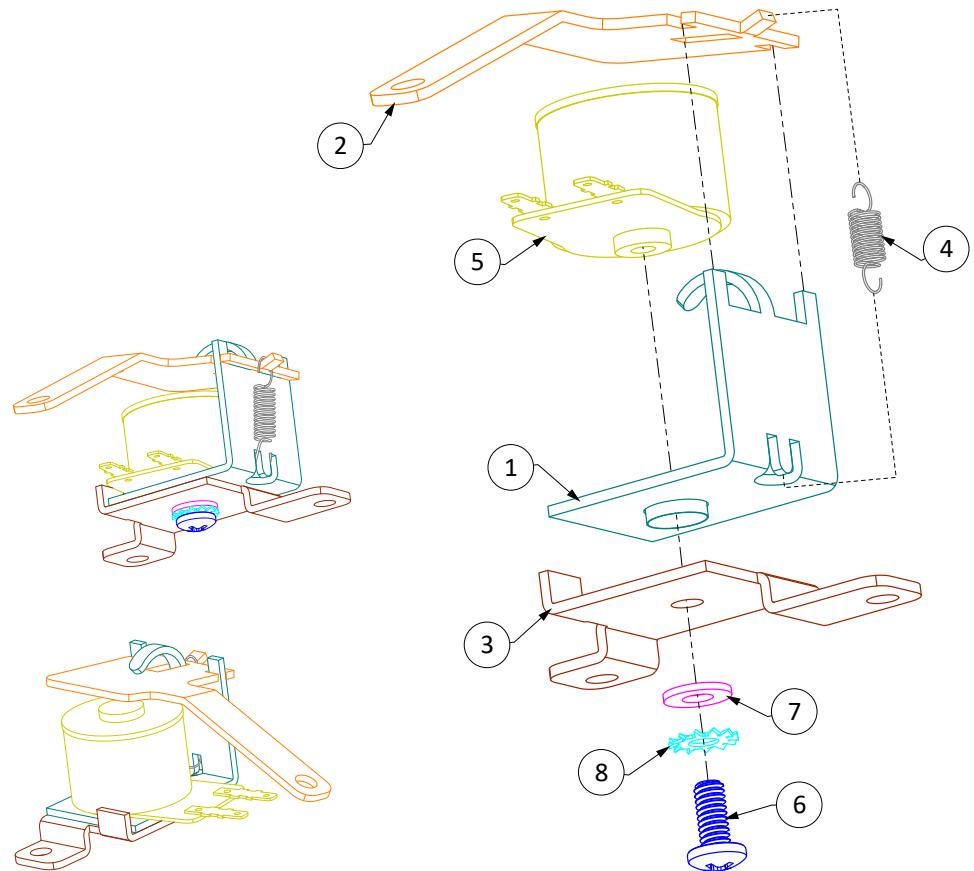
| Item | Part Number | Description | Qty |
|-------------|--------------------|---|------------|
| 1 | 10-000238-00 | POTC PF Rocker Motor Brkt | 1 |
| 2 | 10-000238-03 | POTC PF Rocker Encoder Weldment | 1 |
| 3 | 10-000238-04 | POTC PF Rocker Link Arm | 1 |
| 4 | 10-000238-06 | POTC PF Rocker Adjustment Link | 1 |
| 5 | 11-000050-28 | 5/16" Clevis Pin, 7/8" Long, 5/8" Usable | 1 |
| 6 | 13-009003-00 | Hairpin Clip, Cashbox | 1 |
| 7 | 15-000009-00 | Motor Relay Bd | 1 |
| 8 | 18-005000-00 | U-Shaped Opto, OPB816Z | 2 |
| 9 | 23-005001-00 | WOZ House Motor | 1 |
| 10 | 30-000071-05 | 5L1-FF Snap-In Nyliner | 2 |
| 11 | 80-000004-10 | 4-40 x 5/8" PPH MS | 4 |
| 12 | 80-001003-03 | M3 x 5mm PPH MS, SEMS | 3 |
| 13 | 80-002006-04 | 6-32 x 1/4" HWH Phillips MS, Serrated | 2 |
| 14 | 80-002104-06 | 4-40 x 3/8" HWH MS, Black | 4 |
| 15 | 85-004010-02 | 10-32 x 1/8" Set Screw, Cup Point | 1 |
| 16 | 94-003005-00 | #4 x 3/8" Nylon PCB Stand-Off | 4 |
| 17 | 94-005731-08 | 5/16" x 1/4" Round Spacer, 3/4" OD, Nylon | 1 |



POTC Single Disc Spinning Map Assembly

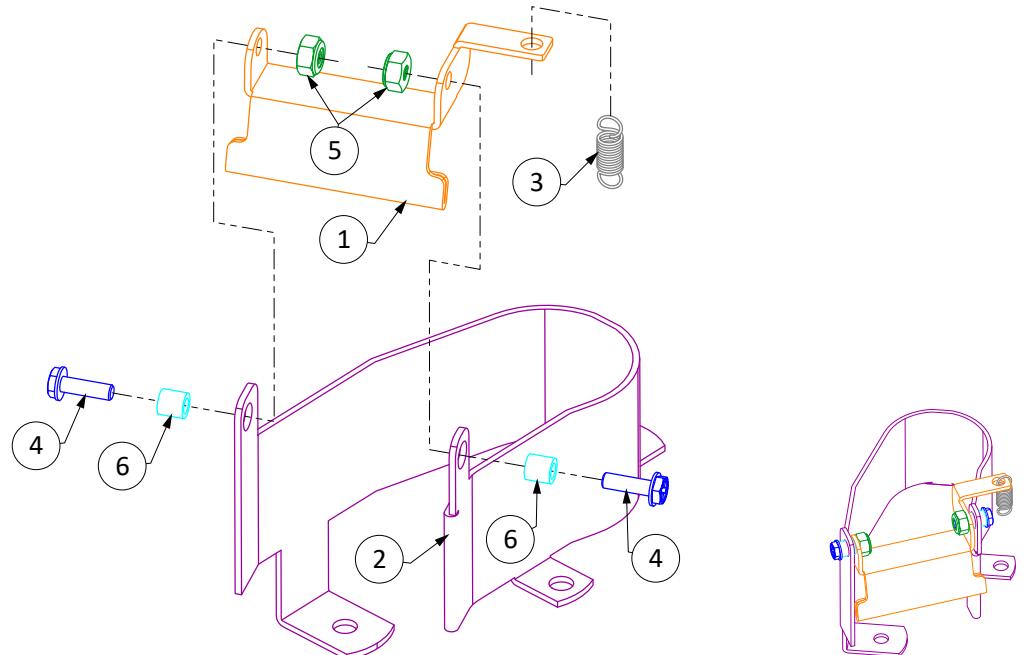
52-000071-10

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000254-10 | POTC Spinning Map Mtg Brkt | 1 |
| 2 | 10-000254-11 | POTC Spinning Map Adj Screw | 1 |
| 3 | 11-000052-10 | POTC Spinning Map Axle | 1 |
| 4 | 15-000009-00 | Motor Relay Bd | 1 |
| 5 | 23-005012-00 | 12VDC Motor, 4200rpm | 1 |
| 6 | 30-000121-10 | POTC Spinning Map Gear, 18 Tooth, 24 DP, 14.5° PA | 1 |
| 7 | 30-000121-11 | POTC Spinning Map Gland Nut | 1 |
| 8 | 30-000121-12 | POTC Spinning Map Jam Nut | 1 |
| 9 | 30-000121-13 | POTC Spinning Map Main Disc, 115 Tooth, 24 DP, 14.5° PA | 1 |
| 10 | 62-000036-01 | POTC Spinning Map Disk Decal | 1 |
| 11 | 62-100001-00 | Liner, White, Round | 1 |
| 12 | 80-000004-10 | 4-40 x 5/8" PPH MS | 4 |
| 13 | 80-0000M3-06 | M3 x 6mm PPH MS | 2 |
| 14 | 80-002008-06 | 8-32 x 3/8" HWH Phillips MS, Serrated | 1 |
| 15 | 80-006208-08 | 8-32 x 1/2" PFH MS, 100° CA | 1 |
| 16 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 3 |
| 17 | 85-004006-04 | 6-32 x 1/4" Set Screw, Cup Point, Black | 2 |
| 18 | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.443" OD, 0.06" TH | 1 |
| 19 | 94-003005-00 | #4 x 3/8" Nylon PCB Stand-Off | 4 |
| 20 | 96-000003-04 | Sleeve Bearing, Flanged, Oil-Embedded, 1/4" Shaft, 1/4" L | 2 |



POTC Cannon Load Latch Coil Assembly
52-000072-00

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 10-000213-09 | Trap Door Latch Trip Coil Frame & Eyelet Assy | 1 |
| 2 | 10-000240-01 | POTC Cannon Load Gate Latch | 1 |
| 3 | 10-000240-02 | POTC Cannon Load Gate Coil Brkt | 1 |
| 4 | 13-007029-04 | Mini Coil Spring, 4oz Tension | 1 |
| 5 | 23-003008-01 | 26-600 Mini Coil Assy, 0.313" Core | 1 |
| 6 | 80-000308-06 | 8-32 x 3/8" PPH MS, Brass | 1 |
| 7 | 92-000308-00 | # 8 Flat Washer, 0.172" ID, 0.375" OD, Brass | 1 |
| 8 | 92-003108-00 | #8 Ext-Tooth Lock Washer, 0.168" ID, 0.381" OD | 1 |



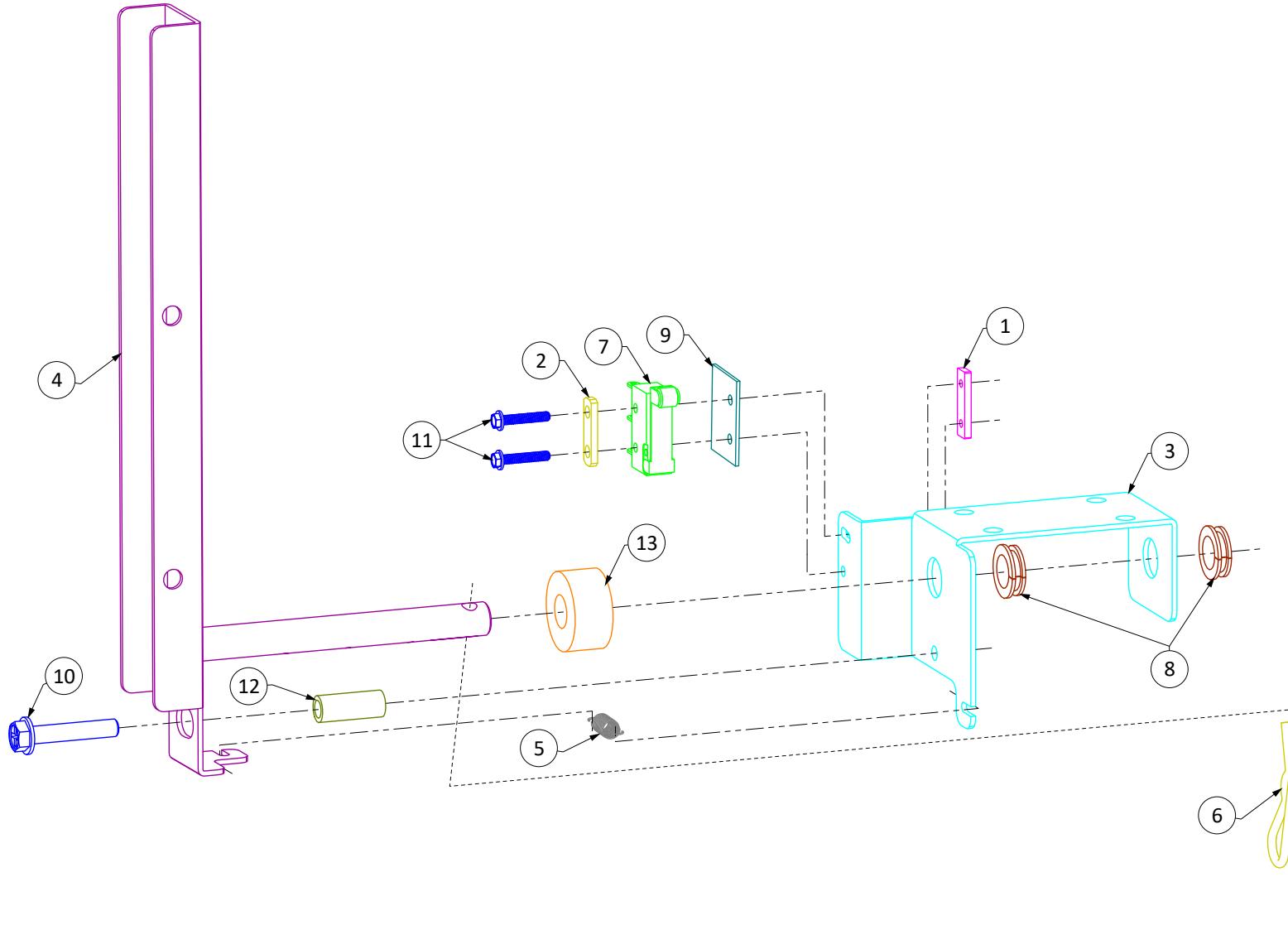
POTC Cannon Load Flatrail & Gate Assembly
52-000072-10

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000240-03 | POTC Cannon Load Gate | 1 |
| 2 | 12-000040-18 | POTC Black Pearl PF Cannon Load Flatrail | 1 |
| 3 | 13-007022-00 | Extension Spring, 0.188" OD, 0.625" L, 0.02" Wire | 1 |
| 4 | 80-002104-06 | 4-40 x 3/8" HWH MS, Black | 2 |
| 5 | 91-000004-00 | 4-40 Nylon Stop Nut | 2 |
| 6 | 94-005104-06 | #4 x 3/16" Round Spacer, 3/16" OD, Nylon | 2 |

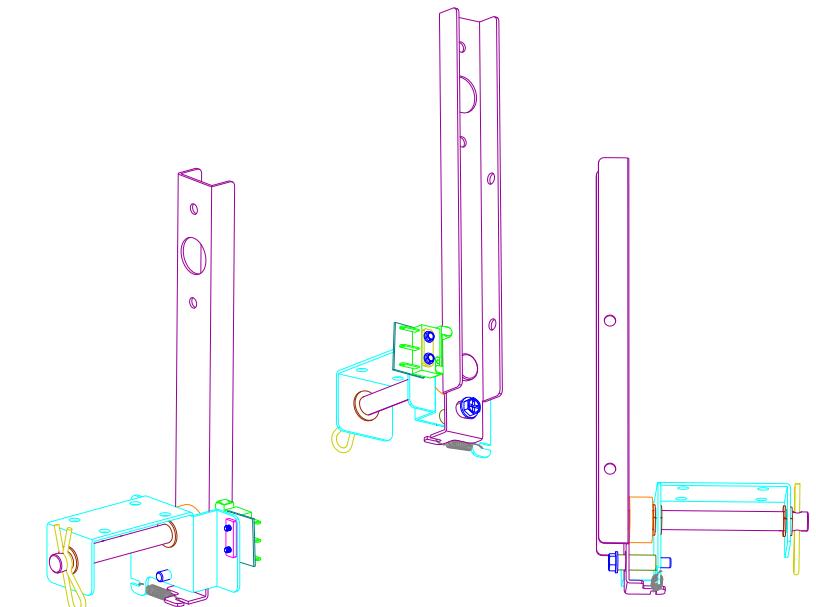
Note: Item 3 spring attaches to the hole in the end of the Cannon Load Gate Latch (item 2 in POTC Cannon Load Latch Coil Assy, 52-000072-00, opposite).

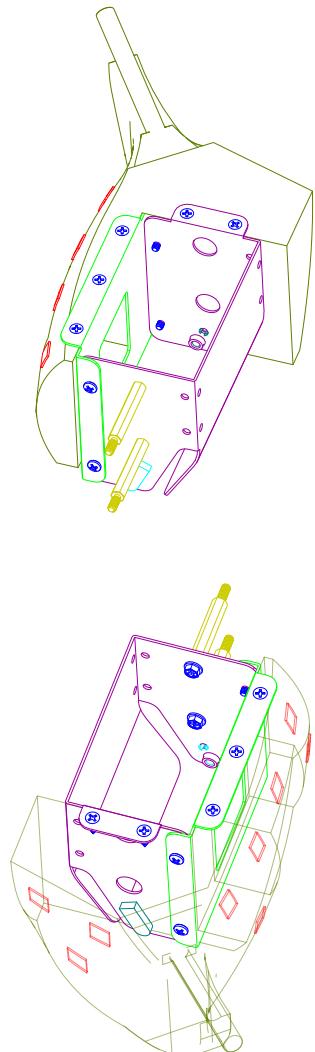
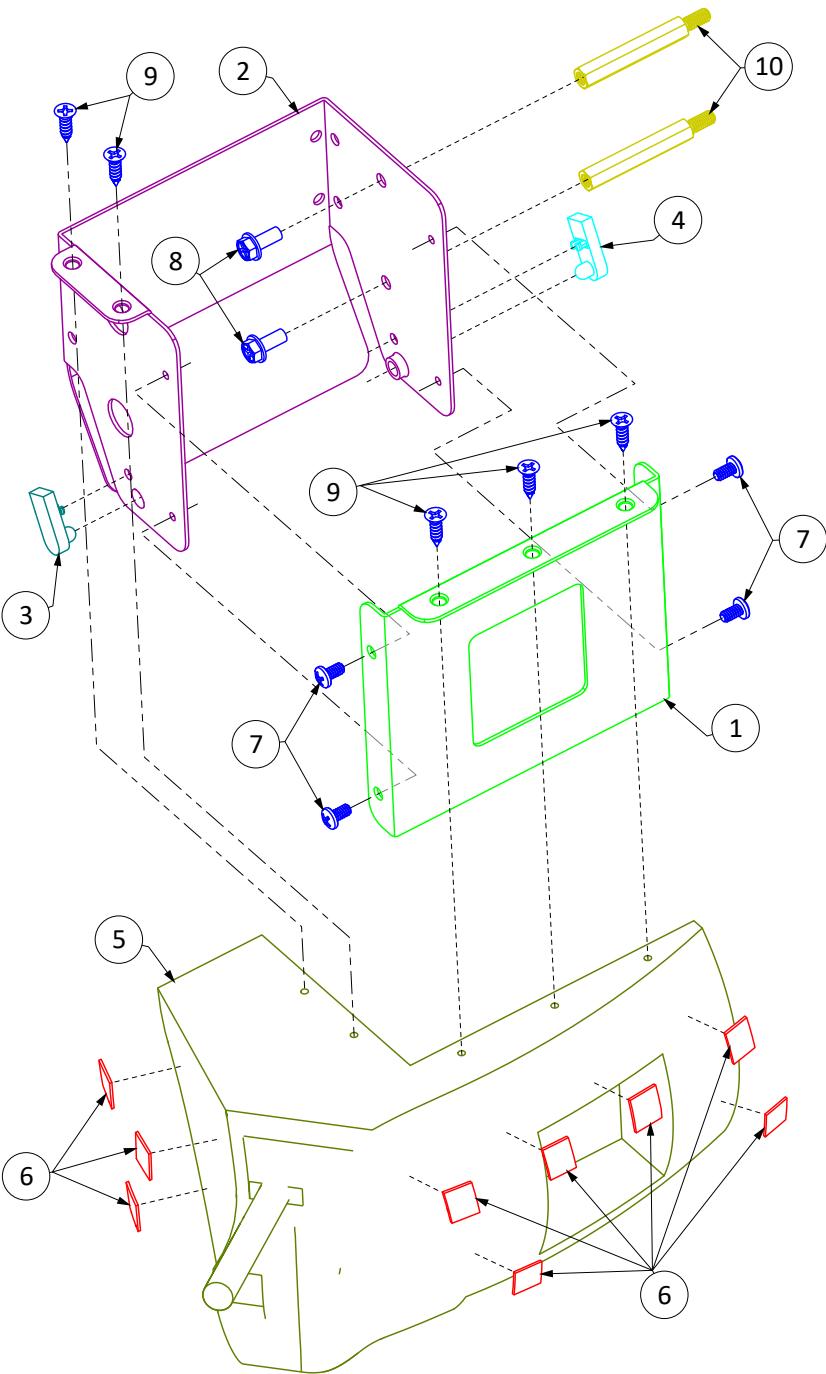
POTC Target Ship Assembly

52-000073-00



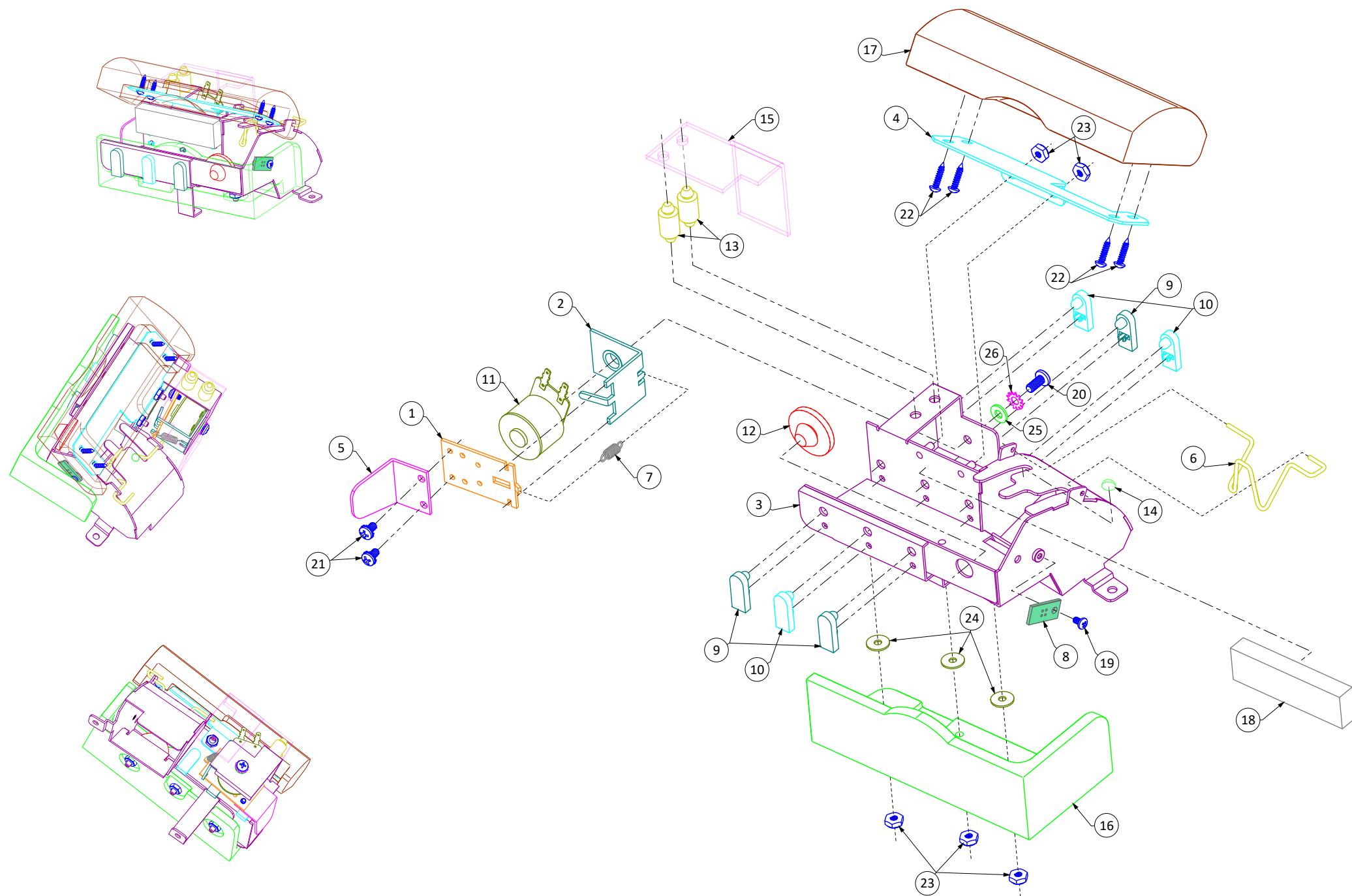
| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000024-00 | Microswitch Nut Plate, 2-56 | 1 |
| 2 | 10-000024-01 | Microswitch Protector Plate, #2 | 1 |
| 3 | 10-000244-06 | POTC Tgt Ship Pivot Mount | 1 |
| 4 | 10-000244-07 | POTC, Tgt Ship Pivot Arm Pin Weldment | 1 |
| 5 | 13-007029-08 | Mini Coil Spring, 8oz Tension | 1 |
| 6 | 13-009004-00 | Hairpin Clip, 3/16" x 1" L | 1 |
| 7 | 18-003005-00 | Microswitch w/Roller Actuator | 1 |
| 8 | 30-000071-05 | 5L1-FF Snap-In Nyliner | 2 |
| 9 | 70-009002-00 | Microswitch Insulator, Fish Paper | 1 |
| 10 | 80-002008-16 | 8-32 x 1" HWH Phillips MS, Serrated | 1 |
| 11 | 80-002102-08 | 2-56 x 1/2" HWH MS, Black | 2 |
| 12 | 94-005208-20 | #8 x 5/8" Round Spacer, 1/4" OD, Nylon | 1 |
| 13 | 94-005731-12 | 5/16" x 3/8" Round Spacer, 3/4" OD, Nylon | 1 |





POTC Target Ship Sculpture Assembly 52-000073-01

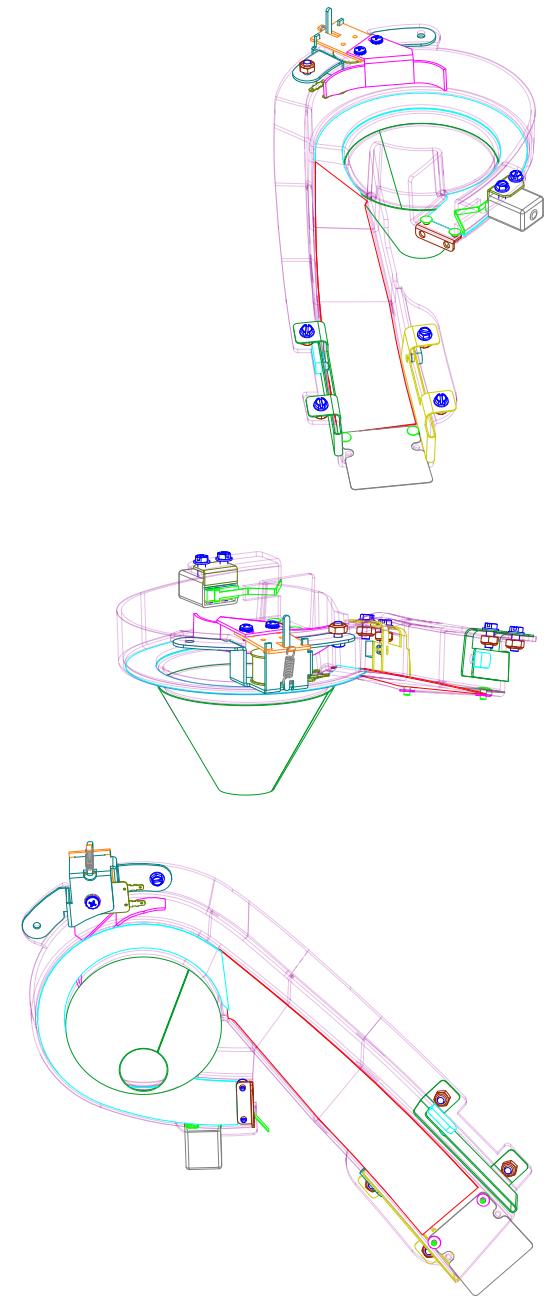
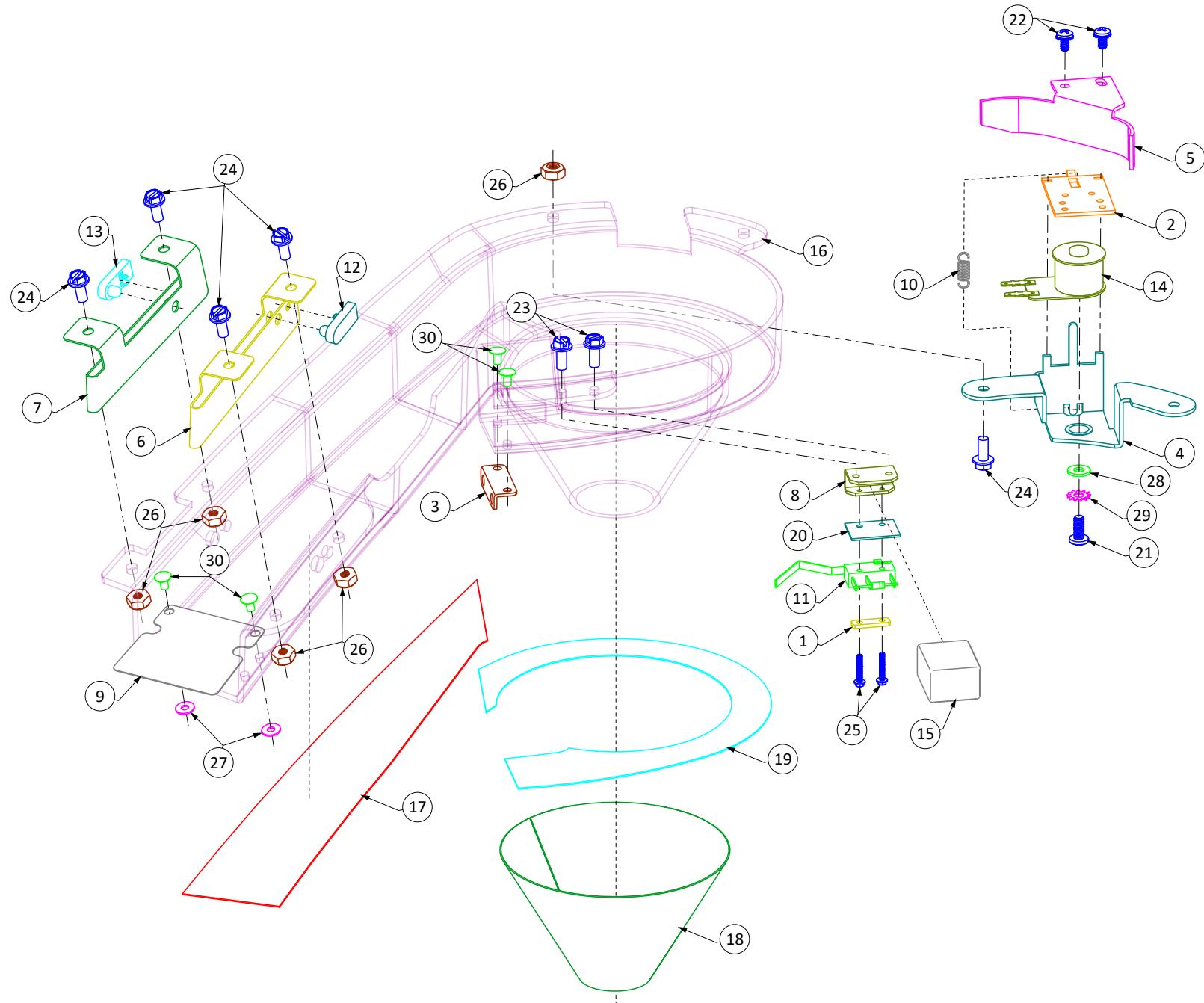
| Item | Part Number | Description | Qty |
|------|--------------|---------------------------------------|-----|
| 1 | 10-000244-01 | POTC Tgt Ship Front Plate | 1 |
| 2 | 10-000244-03 | POTC Tgt Ship Back Plate | 1 |
| 3 | 18-005001-00 | Infrared LED Assy | 1 |
| 4 | 18-005001-01 | Phototransistor Assy | 1 |
| 5 | 32-000043-00 | POTC Tgt Ship Sculpture | 1 |
| 6 | 62-000038-37 | POTC Tgt Ship Cannon Port Decal | 9 |
| 7 | 80-000106-04 | 6-32 x 1/4" PPH MS, Black | 4 |
| 8 | 80-002008-06 | 8-32 x 3/8" HWH Phillips MS, Serrated | 2 |
| 9 | 82-006006-08 | #6 x 1/2" PFH SMS | 5 |
| 10 | 95-001518-24 | 5/16" x 1-1/2" Hex Spacer, M-F, 8-32 | 2 |



POTC Treasure Chest 3-Ball Lock Assembly

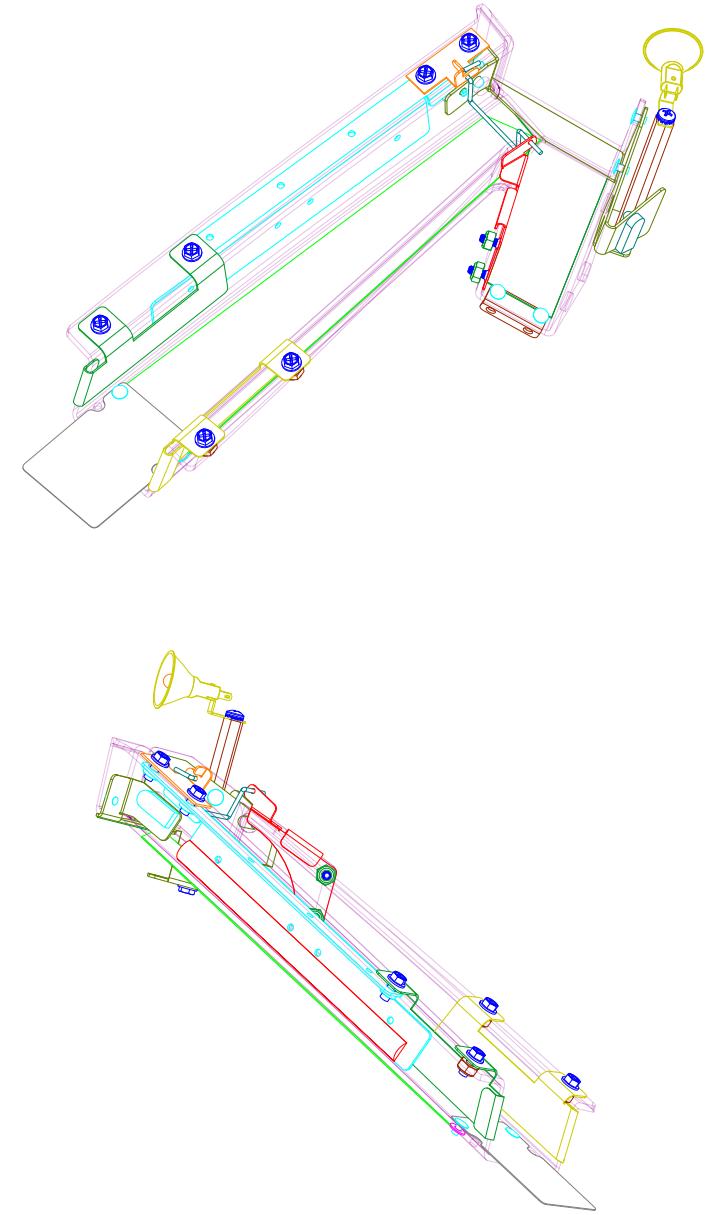
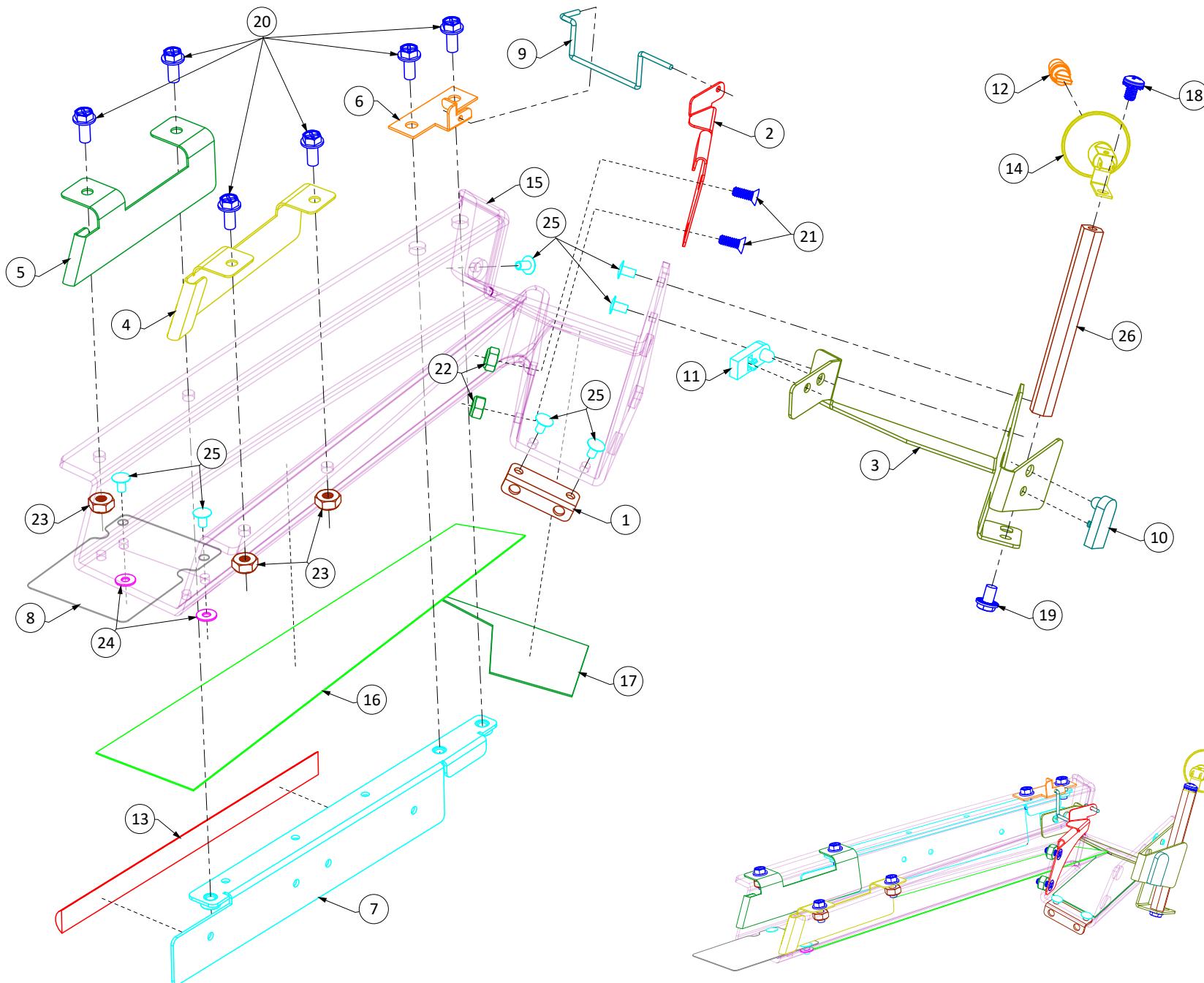
52-000074-00

| Item | Part Number | Description | Qty |
|-------------|--------------------|--|------------|
| 1 | 10-000213-06 | Trap Door Latch Coil Armature | 1 |
| 2 | 10-000213-09 | Trap Door Latch Trip Coil Frame & Eyelet Assy | 1 |
| 3 | 10-000250-00 | POTC Treasure Chest 3-Ball Lock Assy Main Brkt | 1 |
| 4 | 10-000250-04 | POTC Treasure Chest Cover Mtg Brkt | 1 |
| 5 | 10-000250-06 | POTC Treasure Chest 3-Ball Lock Ball Hold Brkt | 1 |
| 6 | 13-003022-21 | POTC Treasure Chest One Way Gate Wireform | 1 |
| 7 | 13-007029-18 | Mini Coil Spring, 18oz Tension | 1 |
| 8 | 15-004251-15 | RGB GI PCB Assy, T LED FP, 5V, No Connector | 1 |
| 9 | 18-005001-00 | Infrared LED Assy | 3 |
| 10 | 18-005001-01 | Phototransistor Assy | 3 |
| 11 | 23-003008-01 | 26-600 Mini Coil Assy, 0.313" Core | 1 |
| 12 | 25-009001-01 | Ball Trough Bumper Plug, Blue | 1 |
| 13 | 25-009005-08 | 1/2" DN Rubber Post | 2 |
| 14 | 25-009009-00 | Clear Rubber Bumper Dot, 7/16" Diam x 13/64" H | 1 |
| 15 | 30-003013-14 | POTC Treasure Chest Clear Plastic | 1 |
| 16 | 32-000045-00 | POTC Treasure Chest Bottom Sculpture | 1 |
| 17 | 32-000045-01 | POTC Treasure Chest Cover Sculpture | 1 |
| 18 | 61-009003-10 | Foam Adhesive Strip, Quick-Recovery, 3/4" x 3/8" | 2-5/8" |
| 19 | 80-000004-03 | 4-40 x 3/16" PPH MS | 1 |
| 20 | 80-000308-06 | 8-32 x 3/8" PPH MS, Brass | 1 |
| 21 | 80-001006-04 | 6-32 x 1/4" PPH MS, SEMS | 2 |
| 22 | 82-000004-08 | #4 x 1/2" PPH SMS | 4 |
| 23 | 91-000006-00 | 6-32 Nylon Stop Nut | 5 |
| 24 | 92-000006-00 | #6 Flat Washer, 0.141" ID, 0.437" OD | 3 |
| 25 | 92-000308-00 | #8 Flat Washer, 0.172" ID, 0.375" OD, Brass | 1 |
| 26 | 92-003108-00 | #8 Ext-Tooth Lock Washer, 0.168" ID, 0.381" OD | 1 |



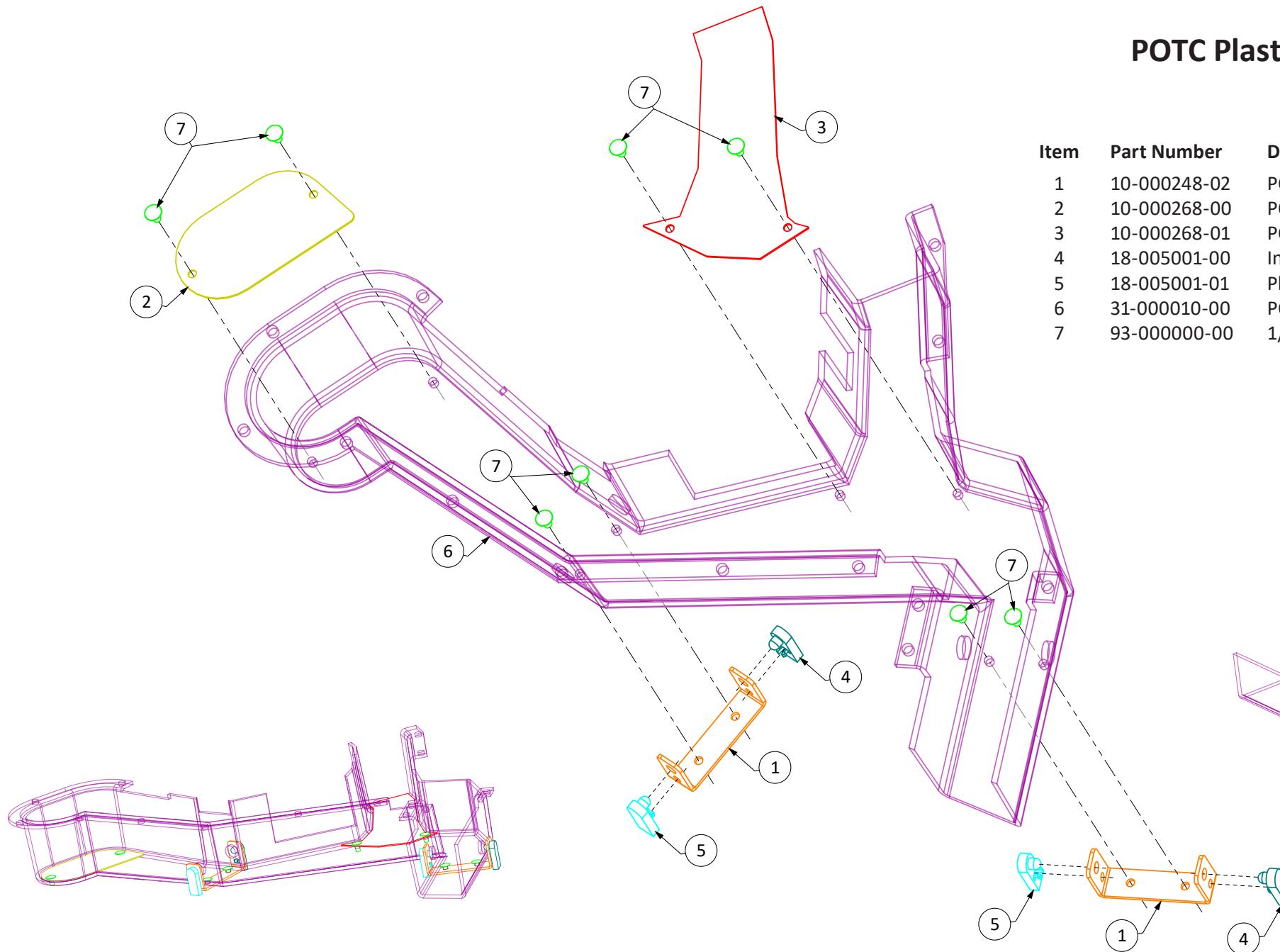
POTC Maelstrom Ramp Assembly
52-000075-00

| Item | Part Number | Description | Qty |
|-------------|--------------------|--|------------|
| 1 | 10-000024-01 | Microswitch Protector Plate, #2 | 1 |
| 2 | 10-000213-06 | Trap Door Latch Coil Armature | 1 |
| 3 | 10-000219-00 | Wire Ramp End Mtg Brkt | 1 |
| 4 | 10-000246-00 | POTC Maelstrom Ramp Diverter Mini Coil Brkt | 1 |
| 5 | 10-000246-01 | POTC Maelstrom Ramp Diverter Arm Brkt | 1 |
| 6 | 10-000246-10 | POTC Maelstrom Ramp Edge Protector, Right | 1 |
| 7 | 10-000246-11 | POTC Maelstrom Ramp Edge Protector, Left | 1 |
| 8 | 10-000249-00 | Ramp Lip Microswitch Mtg Brkt | 1 |
| 9 | 11-006015-00 | POTC Maelstrom Ramp Flap | 1 |
| 10 | 13-007029-18 | Mini Coil Spring, 18oz Tension | 1 |
| 11 | 18-003017-00 | Ramp/Subway Microswitch & Wireform Assy | 1 |
| 12 | 18-005001-00 | Infrared LED Assy | 1 |
| 13 | 18-005001-01 | Phototransistor Assy | 1 |
| 14 | 23-003008-01 | 26-600 Mini Coil Assy, 0.313" Core | 1 |
| 15 | 25-007001-00 | Vinyl Microswitch Cover, Black | 1 |
| 16 | 31-000008-00 | POTC Plastic Maelstrom Ramp | 1 |
| 17 | 62-000037-01 | POTC Maelstrom Ramp Incline Decal | 1 |
| 18 | 62-000037-03 | POTC Maelstrom Ramp Bowl Decal | 1 |
| 19 | 62-000037-04 | POTC Maelstrom Ramp Circle Decal | 1 |
| 20 | 70-009002-00 | Microswitch Insulator, Fish Paper | 1 |
| 21 | 80-000308-06 | 8-32 x 3/8" PPH MS, Brass | 1 |
| 22 | 80-001006-04 | 6-32 x 1/4" PPH MS, SEMS | 2 |
| 23 | 80-002006-04 | 6-32 x 1/4" HWH Phillips MS, Serrated | 2 |
| 24 | 80-002008-06 | 8-32 x 3/8" HWH Phillips MS, Serrated | 5 |
| 25 | 80-002102-08 | 2-56 x 1/2" HWH MS, Black | 2 |
| 26 | 91-000008-00 | 8-32 Nylon Stop Nut | 5 |
| 27 | 92-000004-00 | #4 Flat Washer | 2 |
| 28 | 92-000308-00 | #8 Flat Washer, 0.172" ID, 0.375" OD, Brass | 1 |
| 29 | 92-003108-00 | #8 Ext-Tooth Lock Washer, 0.168" ID, 0.381" OD | 1 |
| 30 | 93-000000-00 | 1/8" x 7/32" Semi-Tubular Rivet, TH | 4 |



POTC Mini PF Access Ramp Assembly
52-000076-00

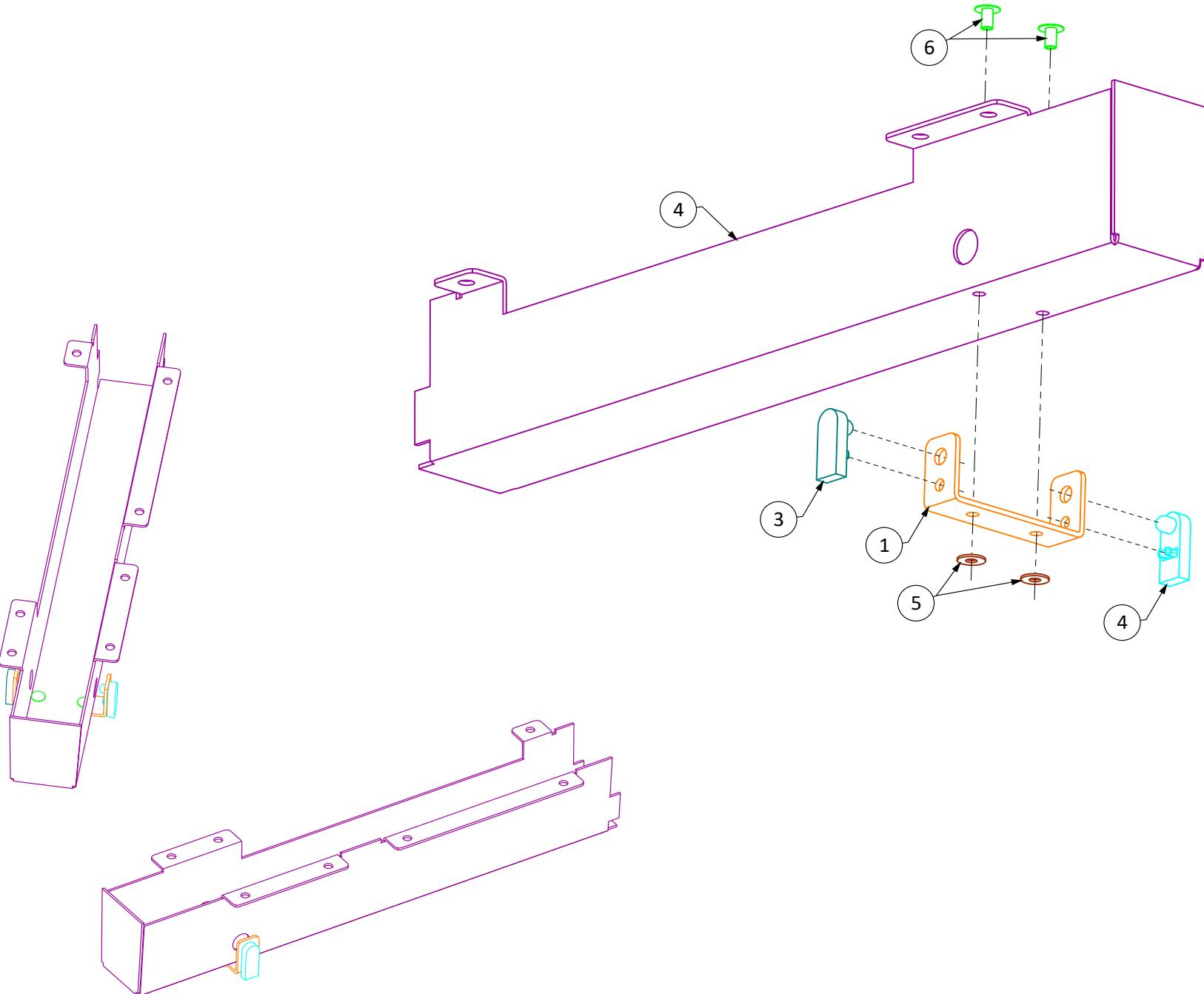
| Item | Part Number | Description | Qty |
|-------------|--------------------|--|------------|
| 1 | 10-000219-00 | Wire Ramp End Mtg Brkt | 1 |
| 2 | 10-000246-03 | POTC Mini PF Access Ramp Gate Support Brkt | 1 |
| 3 | 10-000247-00 | POTC Mini PF Access Ramp Support Brkt | 1 |
| 4 | 10-000247-10 | POTC Mini PF Access Ramp Edge Protector, Right | 1 |
| 5 | 10-000247-11 | POTC Mini PF Access Ramp Edge Protector, Left | 1 |
| 6 | 10-000247-12 | POTC Mini PF Access Ramp One Way Gate Brkt | 1 |
| 7 | 10-000260-00 | POTC Ramp One-Way Gate/LED Strip Mtg Brkt | 1 |
| 8 | 11-006016-00 | POTC Mini PF Access Ramp Flap | 1 |
| 9 | 13-003022-02 | One Way Gate Wireform, 2.69" | 1 |
| 10 | 18-005001-00 | Infrared LED Assy | 1 |
| 11 | 18-005001-01 | Phototransistor Assy | 1 |
| 12 | 24-000017-01 | Wedge Base LED, 12V, 2-Chip, Cool White, 1W | 1 |
| 13 | 24-000030-00 | LED Strip, RGB, 12V, Waterproof | 6" |
| 14 | 30-000047-01 | Spotlight Assy, Black, 20" | 1 |
| 15 | 31-000009-00 | POTC Plastic Mini PF Access Ramp | 1 |
| 16 | 62-000037-02 | POTC Mini PF Access Ramp Decal, Left | 1 |
| 17 | 62-000037-05 | POTC Mini PF Access Ramp Decal, Right | 1 |
| 18 | 80-001008-04 | 8-32 x 1/4" PPH MS, SEMS | 1 |
| 19 | 80-002008-04 | 8-32 x 1/4" HWH Phillips MS, Serrated | 1 |
| 20 | 80-002008-06 | 8-32 x 3/8" HWH Phillips MS, Serrated | 6 |
| 21 | 80-006006-06 | 6-32 x 3/8" PFH MS | 2 |
| 22 | 91-000006-00 | 6-32 Nylon Stop Nut | 2 |
| 23 | 91-000008-00 | 8-32 Nylon Stop Nut | 3 |
| 24 | 92-000004-00 | #4 Flat Washer | 2 |
| 25 | 93-000000-00 | 1/8" x 7/32" Semi-Tubular Rivet, TH | 7 |
| 26 | 95-000508-48 | 5/16" x 3" Hex Spacer, F-F, 8-32, Black | 1 |



POTC Plastic Primary Subway Assembly

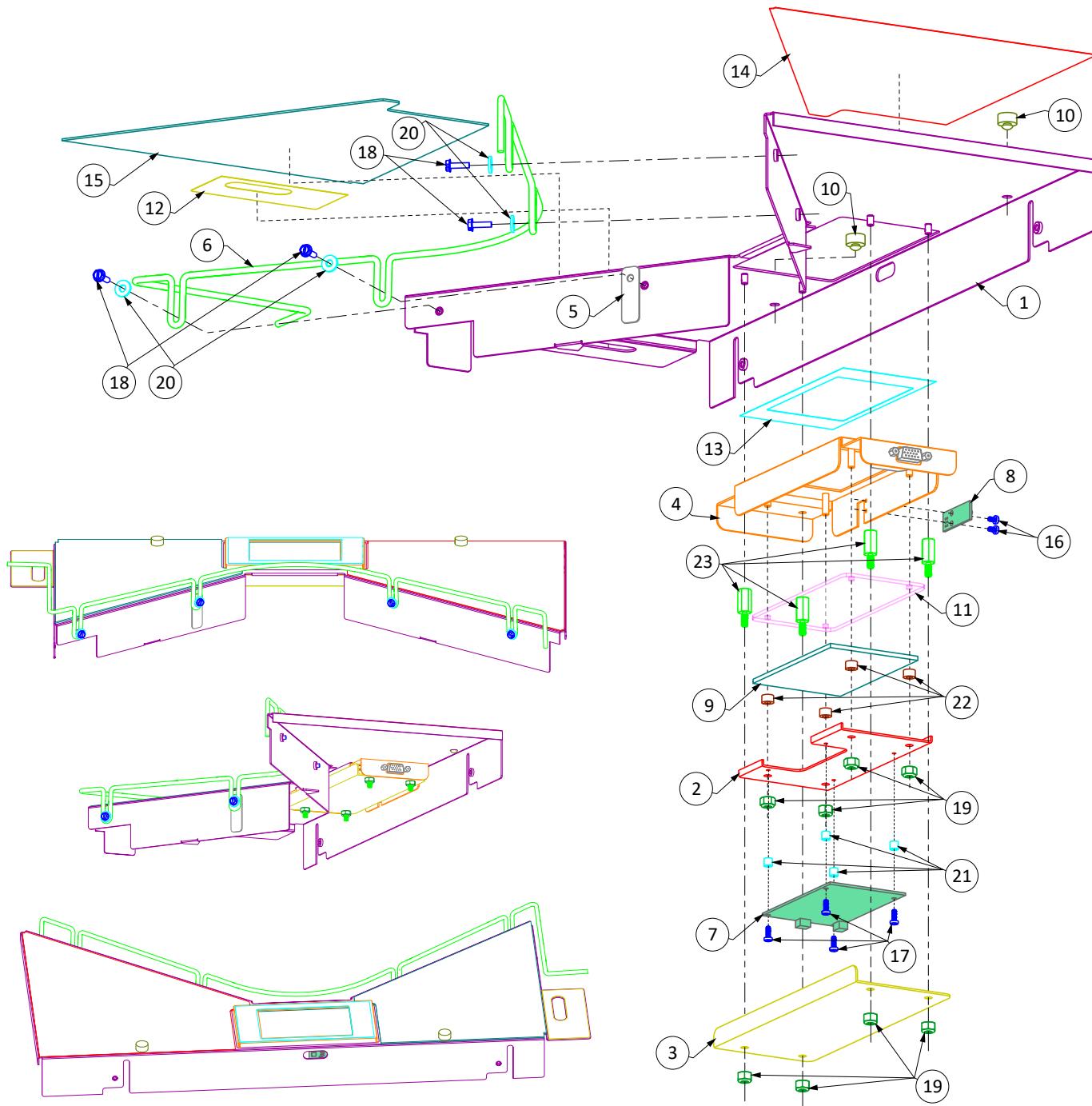
52-000078-00

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000248-02 | POTC Main Subway Opto Brkt | 2 |
| 2 | 10-000268-00 | POTC Subway Maelstrom Entrance Protection Plate | 1 |
| 3 | 10-000268-01 | POTC Subway Flipper Entrance Protection Plate | 1 |
| 4 | 18-005001-00 | Infrared LED Assy | 2 |
| 5 | 18-005001-01 | Phototransistor Assy | 2 |
| 6 | 31-000010-00 | POTC Plastic Primary Subway | 1 |
| 7 | 93-000000-00 | 1/8" x 7/32" Semi-Tubular Rivet, TH | 8 |



POTC Steel Subway Assembly
52-000078-10

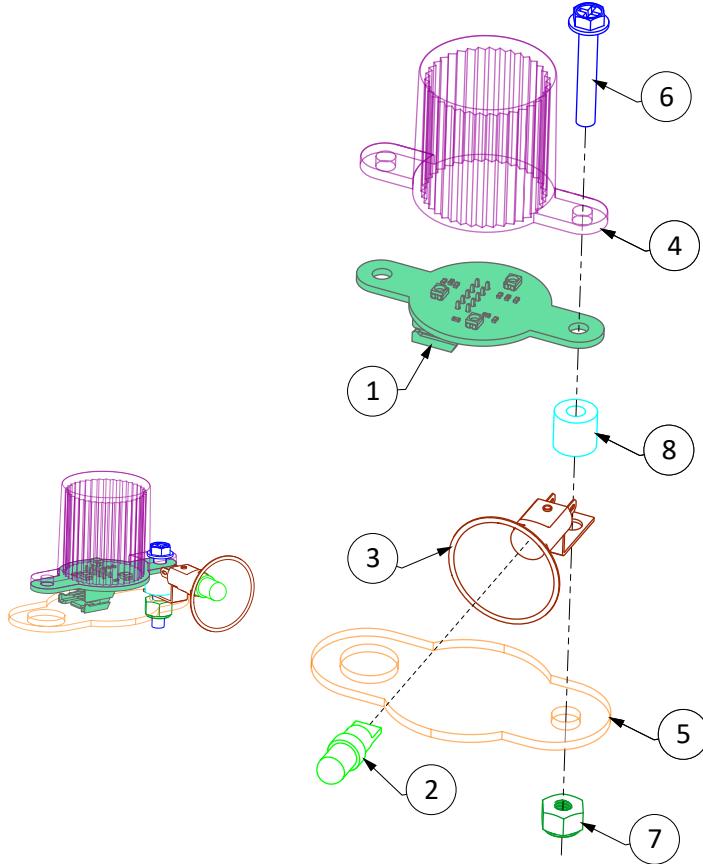
| Item | Part Number | Description | Qty |
|------|--------------|-------------------------------------|-----|
| 1 | 10-000248-02 | POTC Main Subway Opto Brkt | 1 |
| 2 | 10-009008-00 | POTC Map Shot Subway | 1 |
| 3 | 18-005001-00 | Infrared LED Assy | 1 |
| 4 | 18-005001-01 | Phototransistor Assy | 1 |
| 5 | 92-000004-00 | #4 Flat Washer | 2 |
| 6 | 93-000000-00 | 1/8" x 7/32" Semi-Tubular Rivet, TH | 2 |



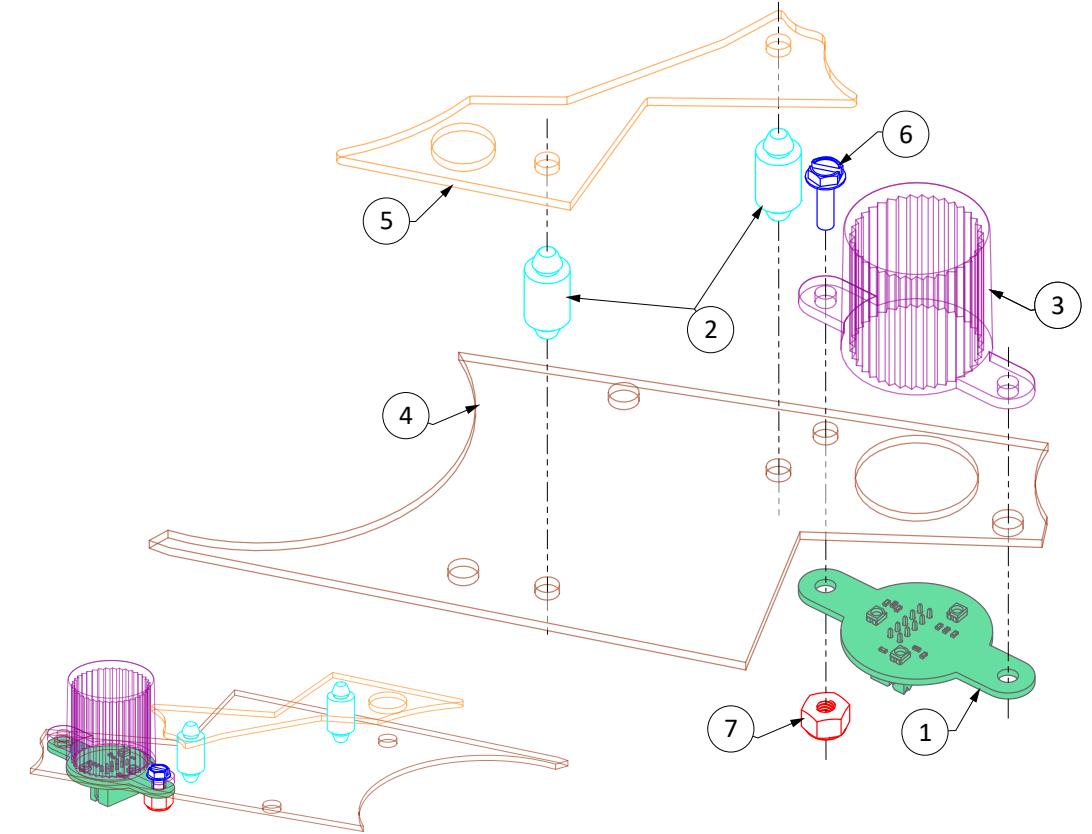
POTC Bottom Arch Assembly

52-000077-00

| Item | Part Number | Description | Qty |
|------|--------------|---|-----|
| 1 | 10-000252-00 | POTC Bottom Arch, Black | 1 |
| 2 | 10-000253-00 | POTC Compass LCD Mtg Brkt | 1 |
| 3 | 10-000253-01 | POTC Compass LCD Cover | 1 |
| 4 | 10-000253-02 | POTC Compass LCD Cover Brkt | 1 |
| 5 | 10-100011-00 | Bottom Arch Ball Deflector Brkt | 1 |
| 6 | 13-000020-00 | POTC Bottom Arch Wire Rail | 1 |
| 7 | 15-000038-00 | 4.3" LCD Driver Bd | 1 |
| 8 | 15-004328-00 | Single RGBW PCB Assy, 5V, No Connector | 1 |
| 9 | 17-000004-00 | 4.3" LCD Screen | 1 |
| 10 | 25-009014-00 | Bottom Arch Rubber Plug | 2 |
| 11 | 30-003013-01 | POTC Compass LCD Cover Clear Plastic | 1 |
| 12 | 62-000038-19 | POTC Shooter Gauge Decal | 1 |
| 13 | 62-000038-30 | POTC Compass LCD Frame Decal | 1 |
| 14 | 62-000038-31 | POTC Bottom Arch Decal, Left Side | 1 |
| 15 | 62-000038-32 | POTC Bottom Arch Decal, Right Side | 1 |
| 16 | 80-000404-03 | 4-40 x 3/16" PPH MS, Nylon | 2 |
| 17 | 80-000404-05 | 4-40 x 5/16" PPH MS, Nylon | 4 |
| 18 | 80-002008-08 | 8-32 x 1/2" HWH Phillips MS, Serrated | 4 |
| 19 | 91-000008-00 | 8-32 Nylon Stop Nut | 8 |
| 20 | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.844" OD, 0.06" TH | 4 |
| 21 | 94-003M28-05 | 2.8mm x 5mm Retaining Spacer, Nylon | 4 |
| 22 | 94-005308-06 | #8 x 3/16" Round Spacer, 5/16" OD, Nylon | 4 |
| 23 | 95-001518-10 | 5/16" x 5/8" Hex Spacer, M-F, 8-32 | 4 |



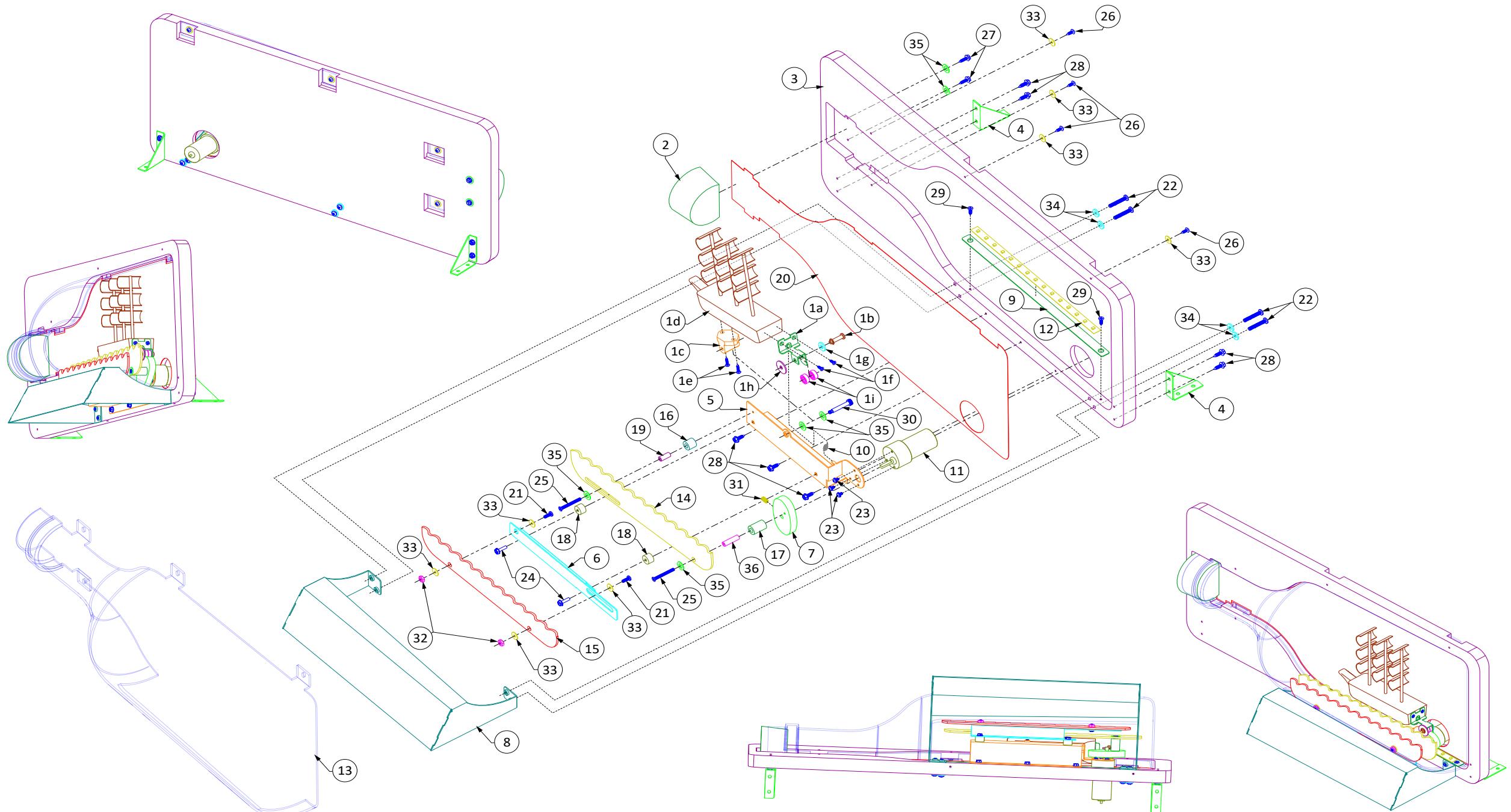
POTC RGB Beacon Flasher & Spotlight Assembly
52-000080-00



POTC RGB Beacon Flasher & PF Plastic Assembly
52-000080-10

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 15-004064-25 | RGB Beacon Flasher PCB Assy, T LED FP, 5V, Rt Angle Conn | 1 |
| 2 | 24-000017-01 | Wedge Base LED, 12V, 2-Chip, Cool White, 1W | 1 |
| 3 | 30-000047-01 | Spotlight Assy, Black, 20" | 1 |
| 4 | 30-000089-13 | Flasher Dome w/Tabs, Clear | 1 |
| 5 | 30-003013-08 | POTC Right Flasher Dome Mtg Plastic | 1 |
| 6 | 80-002008-16 | 8-32 x 1" HWH Phillips MS, Serrated | 1 |
| 7 | 91-000008-00 | 8-32 Nylon Stop Nut | 1 |
| 8 | 94-005408-11 | #8 x 11/32" Round Spacer, 3/8" OD, Nylon | 1 |

| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 15-004064-05 | RGB Beacon Flasher PCB Assy, T LED FP, 5V, Straight Conn | 1 |
| 2 | 25-009005-08 | 1/2" DN Rubber Post | 2 |
| 3 | 30-000089-13 | Flasher Dome w/Tabs, Clear | 1 |
| 4 | 30-003013-10 | POTC Sails Left Flasher Dome Plastic | 1 |
| 5 | 30-003013-11 | POTC Left Flasher Dome Clear Plastic | 1 |
| 6 | 80-002008-08 | 8-32 x 1/2" HWH Phillips MS, Serrated | 1 |
| 7 | 91-000008-00 | 8-32 Nylon Stop Nut | 1 |



POTC CE Ship In A Bottle Topper Assembly
51-005052-00

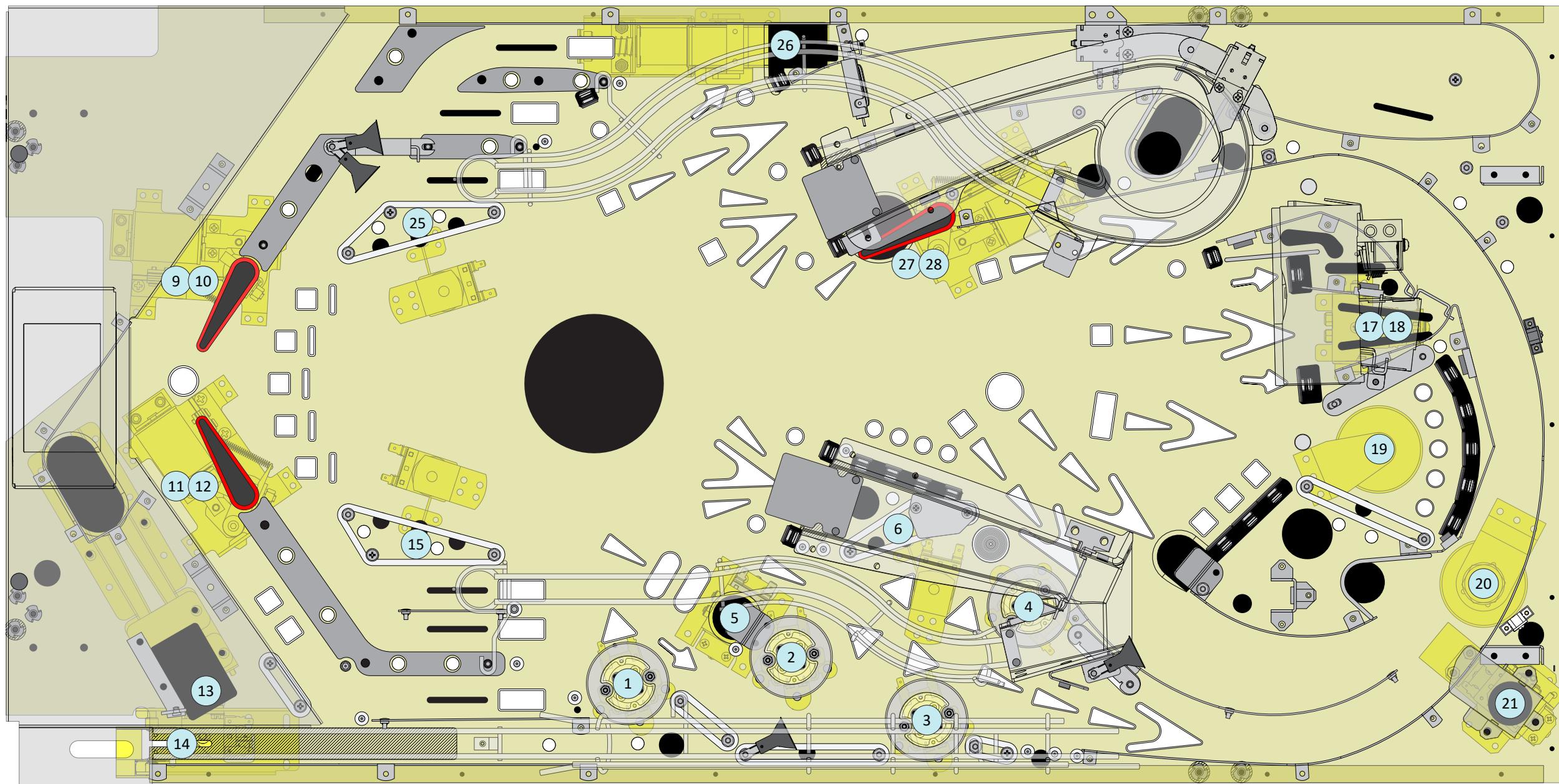
| Item | Part Number | Description | Qty | Item | Part Number | Description | Qty |
|------|--------------|---|-----|------|--------------|---|-----|
| 1 | 51-000090-01 | POTC Ship In A Bottle Topper Ship w/Brkts Assy | 1 | 16 | 30-100019-00 | 1/4" x 7/16" Round Spacer, 1/2" OD, Nylon | 1 |
| a) | 10-000255-01 | POTC Ship In A Bottle Topper Cam Follower Brkt | 1 | 17 | 30-100020-00 | 1/4" x 3/4" Round Spacer, 1/2" OD, Nylon | 1 |
| b) | 11-100018-00 | Clevis Pin w/Groove & Clip, 0.188" Diam x 0.63" Lg | 1 | 18 | 30-100021-00 | #6 x 5/16" Round Spacer, 1/2" OD, Nylon | 2 |
| c) | 30-000097-02 | POTC Ship In A Bottle Topper Ship Mtg Brkt, Plastic | 1 | 19 | 30-100022-00 | #6 x 9/16" Round Spacer, 1/4" OD, Nylon | 1 |
| d) | 51-000090-00 | POTC Ship In A Bottle Topper Ship Model | 1 | 20 | 62-000042-00 | POTC CE Topper Background Decal | 1 |
| e) | 82-000004-08 | #4 x 1/2" PPH SMS | 2 | 21 | 80-000006-06 | 6-32 x 3/8" PPH MS | 2 |
| f) | 82-006104-06 | #4 x 3/8" PFH SMS, Black | 2 | 22 | 80-000008-16 | 8-32 x 1" PPH MS | 4 |
| g) | 92-000110-00 | #10 Flat Washer, 0.219" ID, 0.5" OD, 0.05" TH, Black | 1 | 23 | 80-001003-03 | M3 x 5mm PPH MS, SEMS | 3 |
| h) | 92-100002-00 | #10 Flat Washer, 0.203" ID, 0.75" OD, 0.04" TH, Black | 1 | 24 | 80-002006-08 | 6-32 x 1/2" HWH Phillips MS, Serrated | 2 |
| i) | 96-001003-00 | Ball Bearing, Sealed, 3/16" Shaft, 1/2" OD | 2 | 25 | 80-006006-20 | 6-32 x 1-1/4" PFH MS, 82° CA | 2 |
| 2 | 05-003034-00 | POTC Ship In A Bottle Topper Cork | 1 | 26 | 82-000106-06 | #6 x 3/8" PPH SMS, Black | 4 |
| 3 | 05-009006-10 | POTC Ship In A Bottle Topper Back Panel Wood | 1 | 27 | 82-002006-08 | #6 x 1/2" HWH Phillips SMS | 2 |
| 4 | 10-000162-00 | Back Panel Support Brkt | 2 | 28 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 7 |
| 5 | 10-000255-03 | POTC Ship In A Bottle Topper Motor Mtg Brkt | 1 | 29 | 82-006006-08 | #6 x 1/2" PFH SMS | 2 |
| 6 | 10-000255-04 | POTC Ship In A Bottle Topper Support Brkt | 1 | 30 | 85-000008-16 | 8-32 x 3/16" x 1" SH Shoulder Bolt | 1 |
| 7 | 10-000255-05 | POTC Ship In A Bottle Topper Cam | 1 | 31 | 85-004010-06 | 10-32 x 3/8" Set Screw, Cup Point | 1 |
| 8 | 10-000255-06 | POTC Ship In A Bottle Topper Base Plate | 1 | 32 | 91-000006-00 | 6-32 Nylon Stop Nut | 2 |
| 9 | 10-000255-08 | POTC Ship In A Bottle Topper LED Mtg Plate | 1 | 33 | 92-000006-00 | #6 Flat Washer, 0.141" ID, 0.437" OD | 8 |
| 10 | 13-007029-04 | Mini Coil Spring, 4oz Tension | 1 | 34 | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.443" OD, 0.06" TH | 4 |
| 11 | 23-005001-00 | WOZ House Motor | 1 | 35 | 92-000008-01 | Flat Washer, 0.256" ID, 0.5" OD, 0.032" TH | 6 |
| 12 | 24-000001-23 | LED Strip, Natural White | 10" | 36 | 94-005206-28 | #6 x 7/8" Round Spacer, 1/4" OD, Nylon | 1 |
| 13 | 30-000096-00 | POTC Ship In A Bottle Topper Clear Bottle | 1 | | | | |
| 14 | 30-000097-00 | POTC Ship In A Bottle Topper Waves Plastic, Tall | 1 | | | | |
| 15 | 30-000097-01 | POTC Ship In A Bottle Topper Waves Plastic, Short | 1 | | | | |

Coil, Motor & Light Table (1 of 2)

| Drive # | Coil Function | Coil Type | I/O Bd Power Source | I/O Bd Drive Details | Fuses | Part Number | Part of Assembly | Drawing |
|---------|---------------------------------|----------------|---------------------|------------------------|------------|--------------|------------------|---------|
| 1 | Lower Pop Bumper | 26-1200 | BRN, J104-1, 70V | BRN-BLK, J104-9, Q308 | F701, F704 | 23-000010-00 | 51-000004-01 | C-17 |
| 2 | Lower Middle Pop Bumper | 26-1200 | BRN, J104-1, 70V | BRN-GRY, J104-8, Q307 | F701, F704 | 23-000010-00 | 51-000004-01 | C-17 |
| 3 | Upper Middle Pop Bumper | 26-1200 | BRN, J104-1, 70V | BRN-RED, J104-7, Q306 | F701, F704 | 23-000010-00 | 51-000004-01 | C-17 |
| 4 | Upper Pop Bumper | 26-1200 | BRN, J104-1, 70V | BRN-ORN, J104-6, Q305 | F701, F704 | 23-000010-00 | 51-000004-01 | C-17 |
| 5 | Tortuga VUK | 23-800 | BRN, J104-1, 70V | BRN-YEL, J104-5, Q304 | F701, F704 | 23-000003-00 | 51-000009-00 | C-15 |
| 6 | Upper Slingshot | 23-800 | BRN, J104-1, 70V | BRN-GRN, J104-4, Q303 | F701, F704 | 23-000003-00 | 51-000003-00 | C-14 |
| 7 | Knocker (in backbox) | 23-800 | BRN, J104-1, 70V | BRN-BLU, J104-3, Q302 | F701, F704 | 23-000003-00 | 51-000032-01 | C-27 |
| 8 | Not Used | - | - | - | - | - | - | - |
| 9 | Left Flipper Power | FL-15411 | RED, J105-1, 70V | RED-BLK, J105-10, Q318 | F701, F705 | 23-002003-00 | 52-000132-00 | C-12 |
| 10 | Left Flipper Hold | FL-15411 | RED, J105-1, 70V | RED-BRN, J105-8, Q317 | F701, F705 | 23-002003-00 | 52-000132-00 | C-12 |
| 11 | Right Flipper Power | FL-15411 | RED, J105-1, 70V | RED-GRY, J105-7, Q316 | F701, F705 | 23-002003-00 | 52-000131-00 | C-10 |
| 12 | Right Flipper Hold | FL-15411 | RED, J105-1, 70V | RED-ORN, J105-6, Q315 | F701, F705 | 23-002003-00 | 52-000131-00 | C-10 |
| 13 | 5-Ball Trough VUK | 26-1200 | RED, J105-1, 70V | RED-YEL, J105-5, Q314 | F701, F705 | 23-000010-00 | 51-000021-00 | C-20 |
| 14 | Ball Auto-Launch | 23-800 | RED, J105-1, 70V | RED-GRN, J105-4, Q313 | F701, F705 | 23-000003-00 | 51-000026-00 | C-22 |
| 15 | Right Slingshot | 23-800 | RED, J105-1, 70V | RED-BLU, J105-3, Q312 | F701, F705 | 23-000003-00 | 51-000003-00 | C-14 |
| 16 | Not Used | - | - | - | - | - | - | - |
| 17 | 3-Ball Lock Forks Raise | 23-800 | ORN, J106-1, 70V | ORN-BLK, J106-10, Q328 | F701, F706 | 23-000003-00 | 51-000088-00 | C-30 |
| 18 | 3-Ball Lock Forks Retract | 26-600, Mini | ORN, J106-1, 70V | ORN-BRN, J106-9, Q327 | F701, F706 | 23-003008-01 | 51-000088-00 | C-30 |
| 19 | Chapter Select Buried Magnet | 22-675, Magnet | ORN, J106-1, 70V | ORN-RED, J106-7, Q326 | F701, F706 | 23-004005-00 | 51-000024-01 | C-24 |
| 20 | Orbit Magnet | 22-675, Magnet | ORN, J106-1, 70V | ORN-GRY, J106-6, Q325 | F701, F706 | 23-004005-00 | 51-000024-00 | C-24 |
| 21 | Black Pearl Access VUK | 23-800 | ORN, J106-1, 70V | ORN-YEL, J106-5, Q324 | F701, F706 | 23-000003-00 | 51-000012-00 | C-18 |
| 22-24 | Not Used | - | - | - | - | - | - | - |
| 25 | Left Slingshot | 23-800 | TAN, J107-1, 70V | TAN-BLK, J107-9, Q338 | F702, F707 | 23-000003-00 | 51-000003-00 | C-14 |
| 26 | The Depths Scoop Eject | 23-800 | TAN, J107-1, 70V | TAN-BRN, J107-9, Q337 | F702, F707 | 23-000003-00 | 51-000083-01 | C-29 |
| 27 | Upper Left Flipper Power | FL-15411 | TAN, J107-1, 70V | TAN-RED, J107-9, Q336 | F702, F707 | 23-002003-00 | 52-000132-00 | C-12 |
| 28 | Upper Left Flipper Hold | FL-15411 | TAN, J107-1, 70V | TAN-ORN, J107-9, Q335 | F702, F707 | 23-002003-00 | 52-000132-00 | C-12 |
| 29-32 | Not Used | - | - | - | - | - | - | - |
| 33 | Black Pearl Left Flipper Power | FL-11722 | PNK, J108-1, 70V | PNK-ORN, J108-10, Q408 | F702, F708 | 23-002000-00 | 52-000102-32R | C-12 |
| 34 | Black Pearl Left Flipper Hold | FL-11722 | PNK, J108-1, 70V | PNK-ORN, J108-9, Q407 | F702, F708 | 23-002000-00 | 52-000102-32R | C-12 |
| 35 | Black Pearl Right Flipper Power | FL-11722 | PNK, J108-1, 70V | PNK-ORN, J108-8, Q406 | F702, F708 | 23-002000-00 | 52-000101-33L | C-10 |
| 36 | Black Pearl Right Flipper Hold | FL-11722 | PNK, J108-1, 70V | PNK-ORN, J108-7, Q405 | F702, F708 | 23-002000-00 | 52-000101-33L | C-10 |
| 37 | Black Pearl Cannon | 23-800 | PNK, J108-1, 70V | PNK-YEL, J108-5, Q404 | F702, F708 | 23-000003-00 | 52-000069-00 | C-51 |
| 38-40 | Not Used | - | - | - | - | - | - | - |

Coil, Motor & Light Table (2 of 2)

| Drive # | Coil Function | Coil Type | I/O Bd Power Source | I/O Bd Drive Details | Fuses | Part Number | Part of Assembly | Drawing |
|---------|---------------------------------------|--------------|---------------------|---------------------------|------------|---------------|------------------|---------|
| 41 | Pirate Spinning PB Motor (LE/CE only) | Motor | YEL, J109-1, 12V | YEL-BLK, J109-2, Q411 | F714, F709 | 23-005011-00 | 51-000091-00 | C-32 |
| 42 | Barrel Spinning PB Motor (LE/CE only) | Motor | YEL, J109-1, 12V | YEL-BRN, J109-3, Q412 | F714, F709 | 23-005011-00 | 51-000091-10 | C-33 |
| 43 | Ramp LED Strip, RED | LED Strip | YEL, J109-1, 12V | YEL-RED, J109-4, Q413 | F714, F709 | 24-000030-00 | 52-000076-00 | C-64 |
| 44 | Ramp LED Strip, GRN | LED Strip | YEL, J109-1, 12V | YEL-ORN, J109-6, Q414 | F714, F709 | 24-000030-00 | 52-000076-00 | C-64 |
| 45 | Ramp LED Strip, BLU | LED Strip | YEL, J109-1, 12V | YEL-GRY, J109-7, Q415 | F714, F709 | 24-000030-00 | 52-000076-00 | C-64 |
| 46 | Spotlights (5 ea) | LED | YEL, J109-1, 12V | YEL-GRN, J109-8, Q416 | F714, F709 | 24-000017-01 | - | - |
| 47 | Black Pearl Mini PF Rock Motor | Motor | YEL, J109-1, 12V | YEL-BLU, J109-9, Q417 | F714, F709 | 23-005001-00 | 52-000068-00 | C-54 |
| 48 | Black Pearl Mini PF Rock Relay | Relay | YEL, J109-1, 12V | YEL-VIO, J109-10, Q418 | F714, F709 | 160-000000-0T | 52-000068-00 | C-54 |
| 49 | Chapter Select Up Post | 26-1200 | PLM, J110-1, 20V | PLM-BLK, J110-2, Q421 | F703, F710 | 23-000010-00 | 51-000030-10 | C-26 |
| 50 | 3-Ball Chest Lock Release | 26-600, Mini | PLM, J110-1, 20V | PLM-BRN, J110-3, Q422 | F703, F710 | 23-003008-01 | 52-000074-00 | C-60 |
| 51 | Left Orbit Up Post | 26-1200 | PLM, J110-1, 20V | PLM-RED, J110-5, Q423 | F703, F710 | 23-000010-00 | 51-000030-10 | C-26 |
| 52-54 | Not Used | - | - | - | - | - | - | - |
| 55 | Maelstrom Ramp Diverter | 26-600, Mini | PLM, J110-1, 20V | PLM-BLU, J110-9, Q427 | F703, F710 | 23-003008-01 | 52-000075-00 | C-62 |
| 56 | Left Turnaround Diverter | 26-600, Mini | PLM, J110-1, 20V | PLM-GRY, J110-10, Q428 | F703, F710 | 23-003008-01 | 51-005051-00 | C-50 |
| 57-71 | Not Used | - | - | - | - | - | - | - |
| 72 | Black Pearl Cannon Load Door Lock | 26-600, Mini | VIO, J112-1, 20V | VIO-GRY, J112-10, Q508 | F703, F712 | 23-003008-01 | 52-000072-00 | C-57 |
| 73 | Shaker Motor | Motor | LT BLU, J113-2, 12V | LT BLU-BLK, J113-3, Q511 | F714, F713 | 23-005003-01 | 51-005027-01 | C-39 |
| 74 | Topper Light (LE) | LED Strip | LT BLU, J113-2, 12V | LT BLU-BRN, J113-4, Q512 | F714, F713 | 24-000001-13 | 51-006010-00 | C-4 |
| | Topper Light (CE) | LED Strip | LT BLU, J113-2, 12V | LT BLU-BRN, J113-4, Q512 | F714, F713 | 24-000001-23 | 51-005052-00 | C-70 |
| 75 | Redemption Ticket Motor | Motor | LT BLU, J113-2, 12V | LT BLU-RED, J113-5, Q513 | F714, F713 | - | - | - |
| 76 | Map Disc Motor | Motor | LT BLU, J113-2, 12V | LT BLU-ORN, J113-6, Q514 | F714, F713 | 23-005012-00 | 52-000071-10 | C-56 |
| 77 | Map Disc Relay | Relay | LT BLU, J113-2, 12V | LT BLU-YEL, J113-7, Q515 | F714, F713 | 160-000000-0T | 52-000071-10 | C-56 |
| 78 | Not Used | - | - | - | - | - | - | - |
| 79 | Start Button Light | LED | LT BLU, J113-2, 12V | LT BLU-GRY, J113-9, Q517 | F714, F713 | 24-000017-00 | 18-007023-04 | C-2 |
| 80 | Topper Motor Drive (CE only) | Motor | LT BLU, J113-2, 12V | LT BLU-VIO, J113-10, Q518 | F714, F713 | 23-005001-00 | 51-005052-00 | C-70 |

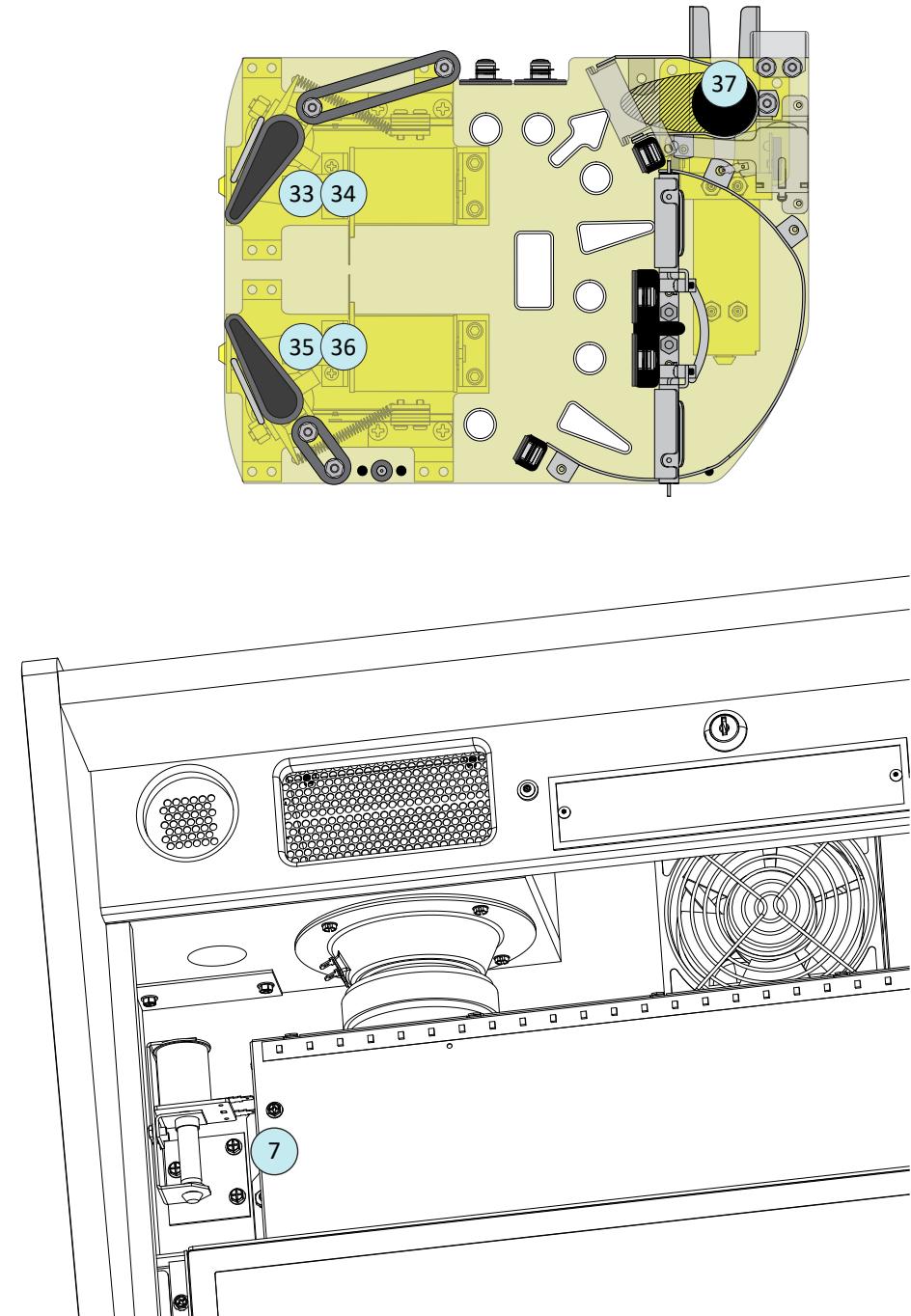


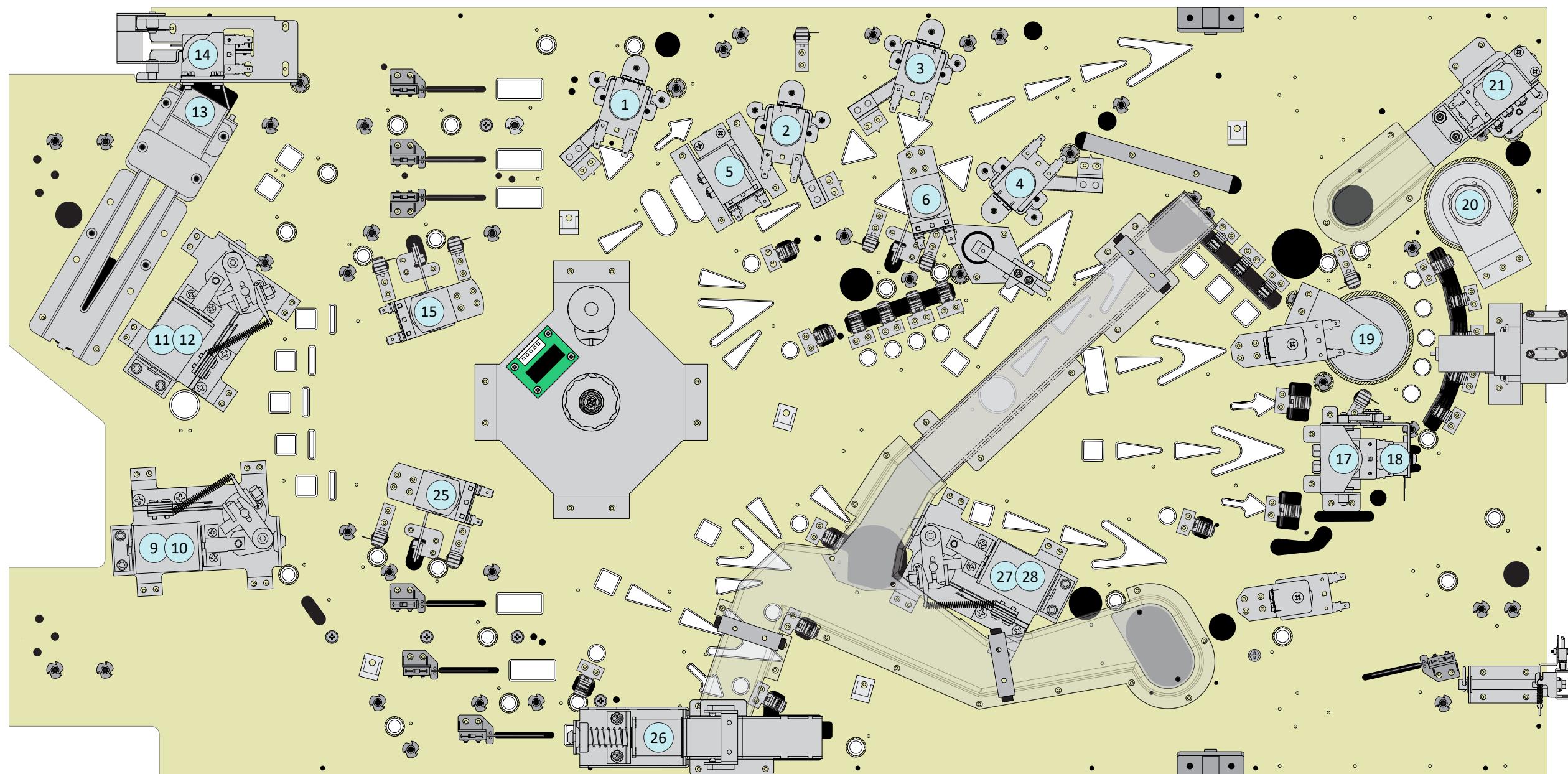
70-Volt Coil Locations

Above Playfield

| Drive | Coil Function | Part Number | Part of Assembly | Drawing |
|-------|---------------------------------|--------------|------------------|---------|
| 1 | Lower Pop Bumper | 23-000010-00 | 51-000004-01 | C-17 |
| 2 | Lower Middle Pop Bumper | 23-000010-00 | 51-000004-01 | C-17 |
| 3 | Upper Middle Pop Bumper | 23-000010-00 | 51-000004-01 | C-17 |
| 4 | Upper Pop Bumper | 23-000010-00 | 51-000004-01 | C-17 |
| 5 | Tortuga VUK | 23-000003-00 | 51-000009-00 | C-15 |
| 6 | Upper Slingshot | 23-000003-00 | 51-000003-00 | C-14 |
| 7 | Knocker (in backbox) | 23-000003-00 | 51-000032-01 | C-27 |
| 9 | Left Flipper Power | 23-002003-00 | 52-000132-00 | C-12 |
| 10 | Left Flipper Hold | 23-002003-00 | 52-000132-00 | C-12 |
| 11 | Right Flipper Power | 23-002003-00 | 52-000131-00 | C-10 |
| 12 | Right Flipper Hold | 23-002003-00 | 52-000131-00 | C-10 |
| 13 | 5-Ball Trough VUK | 23-000010-00 | 51-000021-00 | C-20 |
| 14 | Ball Auto-Launch | 23-000003-00 | 51-000026-00 | C-22 |
| 15 | Right Slingshot | 23-000003-00 | 51-000003-00 | C-14 |
| 17 | 3-Ball Lock Forks Raise | 23-000003-00 | 51-000088-00 | C-30 |
| 18 | 3-Ball Lock Forks Retract | 23-003008-01 | 51-000088-00 | C-30 |
| 19 | Chapter Select Buried Magnet | 23-004005-00 | 51-000024-01 | C-24 |
| 20 | Orbit Magnet | 23-004005-00 | 51-000024-00 | C-24 |
| 21 | Black Pearl Access VUK | 23-000003-00 | 51-000012-00 | C-18 |
| 25 | Left Slingshot | 23-000003-00 | 51-000003-00 | C-14 |
| 26 | The Depths Scoop Eject | 23-000003-00 | 51-000083-01 | C-29 |
| 27 | Upper Left Flipper Power | 23-002003-00 | 52-000132-00 | C-12 |
| 28 | Upper Left Flipper Hold | 23-002003-00 | 52-000132-00 | C-12 |
| 33 | Black Pearl Left Flipper Power | 23-002000-00 | 52-000102-32R | C-12 |
| 34 | Black Pearl Left Flipper Hold | 23-002000-00 | 52-000102-32R | C-12 |
| 35 | Black Pearl Right Flipper Power | 23-002000-00 | 52-000101-33L | C-10 |
| 36 | Black Pearl Right Flipper Hold | 23-002000-00 | 52-000101-33L | C-10 |
| 37 | Black Pearl Cannon | 23-000003-00 | 52-000069-00 | C-51 |

(70V coil wiring table on pg C-154)



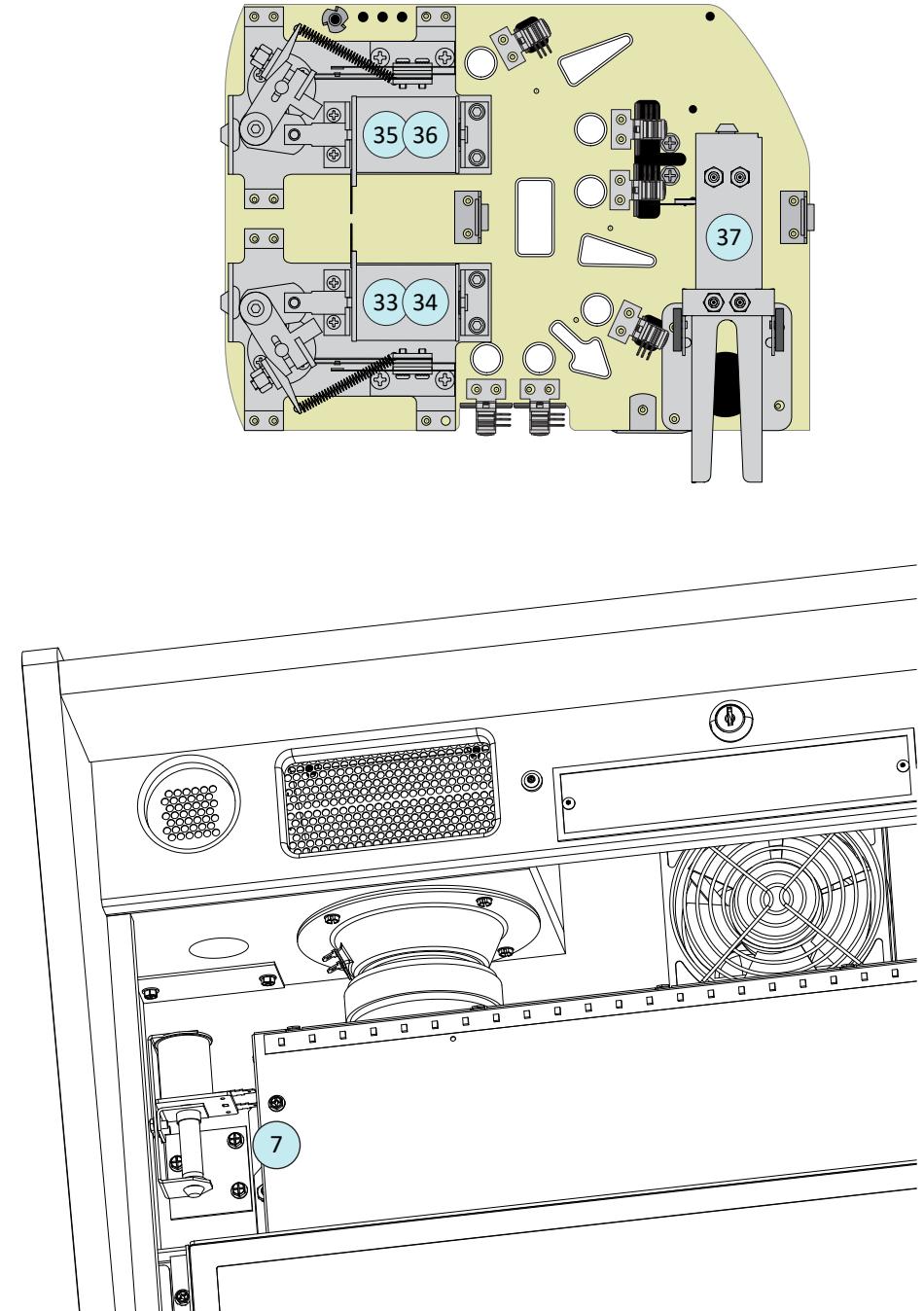


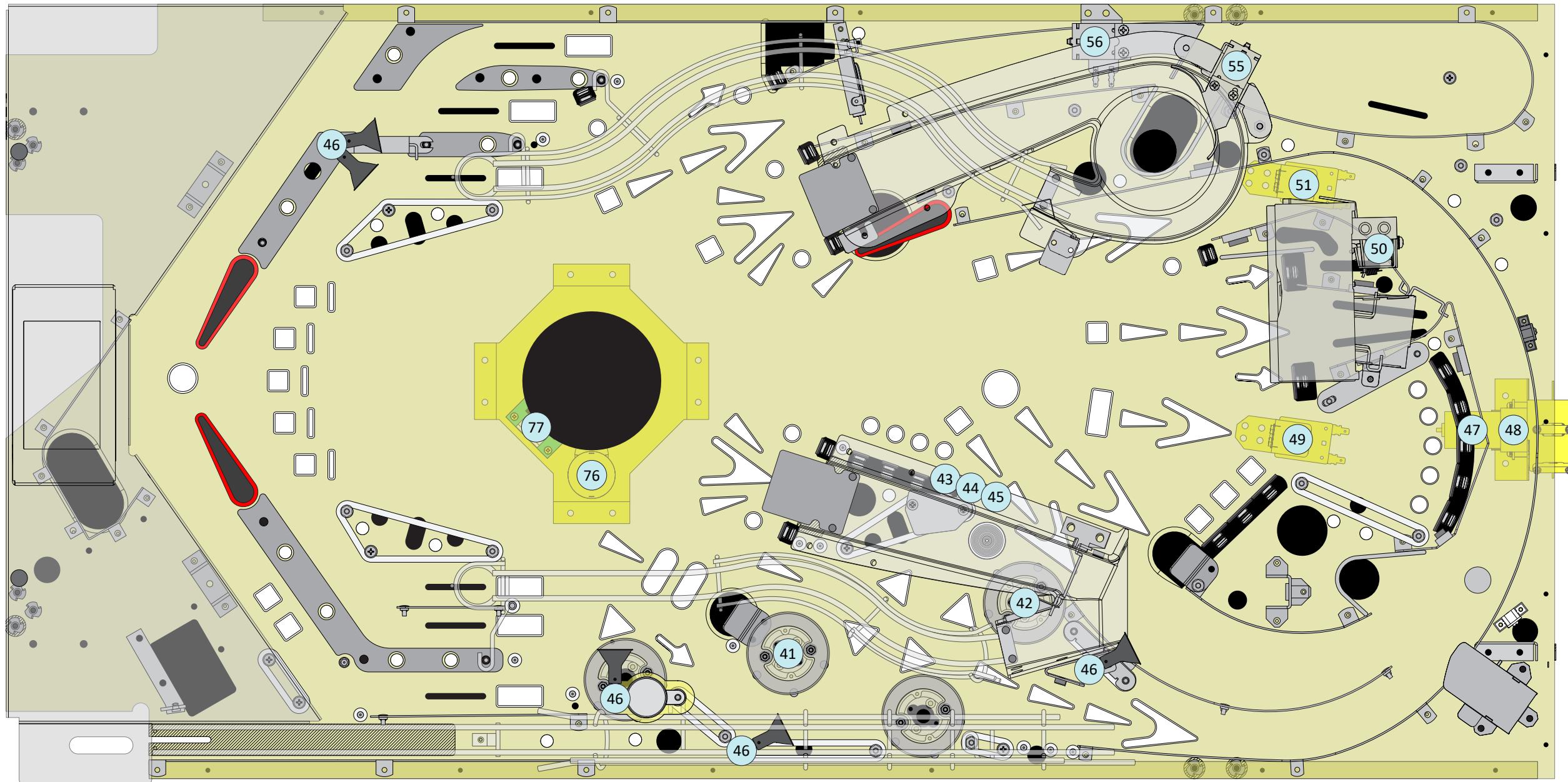
70-Volt Coil Locations

Under Playfield

| Drive | Coil Function | Part Number | Part of Assembly | Drawing |
|-------|---------------------------------|--------------|------------------|---------|
| 1 | Lower Pop Bumper | 23-000010-00 | 51-000004-01 | C-17 |
| 2 | Lower Middle Pop Bumper | 23-000010-00 | 51-000004-01 | C-17 |
| 3 | Upper Middle Pop Bumper | 23-000010-00 | 51-000004-01 | C-17 |
| 4 | Upper Pop Bumper | 23-000010-00 | 51-000004-01 | C-17 |
| 5 | Tortuga VUK | 23-000003-00 | 51-000009-00 | C-15 |
| 6 | Upper Slingshot | 23-000003-00 | 51-000003-00 | C-14 |
| 7 | Knocker (in backbox) | 23-000003-00 | 51-000032-01 | C-27 |
| 9 | Left Flipper Power | 23-002003-00 | 52-000132-00 | C-12 |
| 10 | Left Flipper Hold | 23-002003-00 | 52-000132-00 | C-12 |
| 11 | Right Flipper Power | 23-002003-00 | 52-000131-00 | C-10 |
| 12 | Right Flipper Hold | 23-002003-00 | 52-000131-00 | C-10 |
| 13 | 5-Ball Trough VUK | 23-000010-00 | 51-000021-00 | C-20 |
| 14 | Ball Auto-Launch | 23-000003-00 | 51-000026-00 | C-22 |
| 15 | Right Slingshot | 23-000003-00 | 51-000003-00 | C-14 |
| 17 | 3-Ball Lock Forks Raise | 23-000003-00 | 51-000088-00 | C-30 |
| 18 | 3-Ball Lock Forks Retract | 23-003008-01 | 51-000088-00 | C-30 |
| 19 | Chapter Select Buried Magnet | 23-004005-00 | 51-000024-01 | C-24 |
| 20 | Orbit Magnet | 23-004005-00 | 51-000024-00 | C-24 |
| 21 | Black Pearl Access VUK | 23-000003-00 | 51-000012-00 | C-18 |
| 25 | Left Slingshot | 23-000003-00 | 51-000003-00 | C-14 |
| 26 | The Depths Scoop Eject | 23-000003-00 | 51-000083-01 | C-29 |
| 27 | Upper Left Flipper Power | 23-002003-00 | 52-000132-00 | C-12 |
| 28 | Upper Left Flipper Hold | 23-002003-00 | 52-000132-00 | C-12 |
| 33 | Black Pearl Left Flipper Power | 23-002000-00 | 52-000102-32R | C-12 |
| 34 | Black Pearl Left Flipper Hold | 23-002000-00 | 52-000102-32R | C-12 |
| 35 | Black Pearl Right Flipper Power | 23-002000-00 | 52-000101-33L | C-10 |
| 36 | Black Pearl Right Flipper Hold | 23-002000-00 | 52-000101-33L | C-10 |
| 37 | Black Pearl Cannon | 23-000003-00 | 52-000069-00 | C-51 |

(70V coil wiring table on pg C-154)

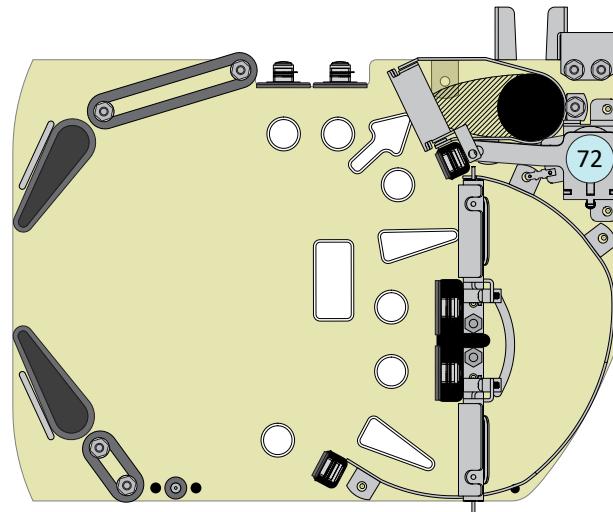




20-Volt Coil Locations

Above Playfield

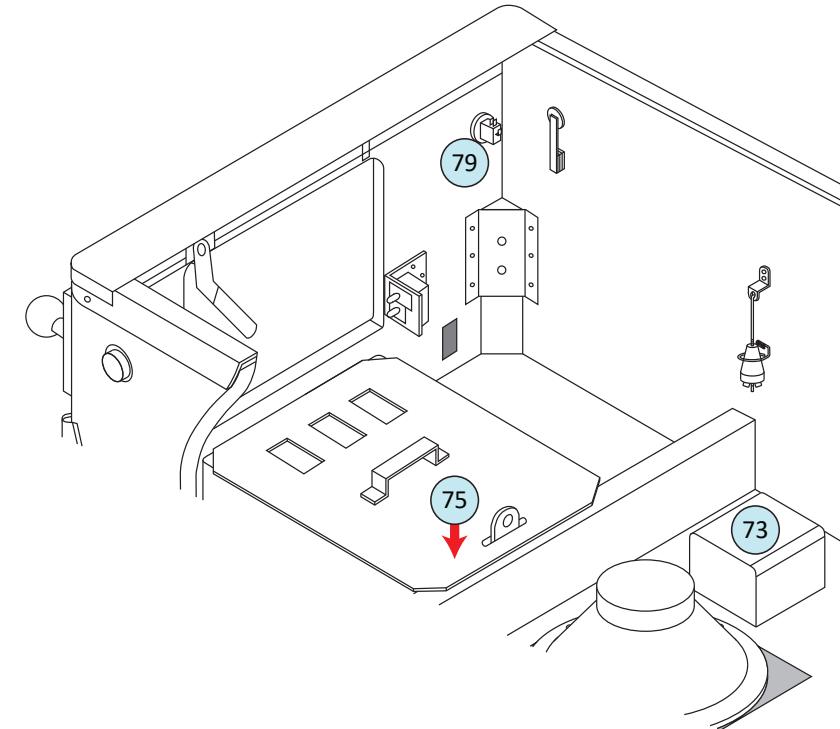
| Drive | Function | Part Number | Part of Assembly | Drawing |
|-------|-----------------------------------|--------------|------------------|---------|
| 49 | Chapter Select Up Post | 23-000010-00 | 51-000030-10 | C-26 |
| 50 | 3-Ball Chest Lock Release | 23-003008-01 | 52-000074-00 | C-60 |
| 51 | Left Orbit Up Post | 23-000010-00 | 51-000030-10 | C-26 |
| 55 | Maelstrom Ramp Diverter | 23-003008-01 | 52-000075-00 | C-62 |
| 56 | Left Turnaround Loop Diverter | 23-003008-01 | 51-005051-00 | C-50 |
| 72 | Black Pearl Cannon Load Door Lock | 23-003008-01 | 52-000072-00 | C-57 |



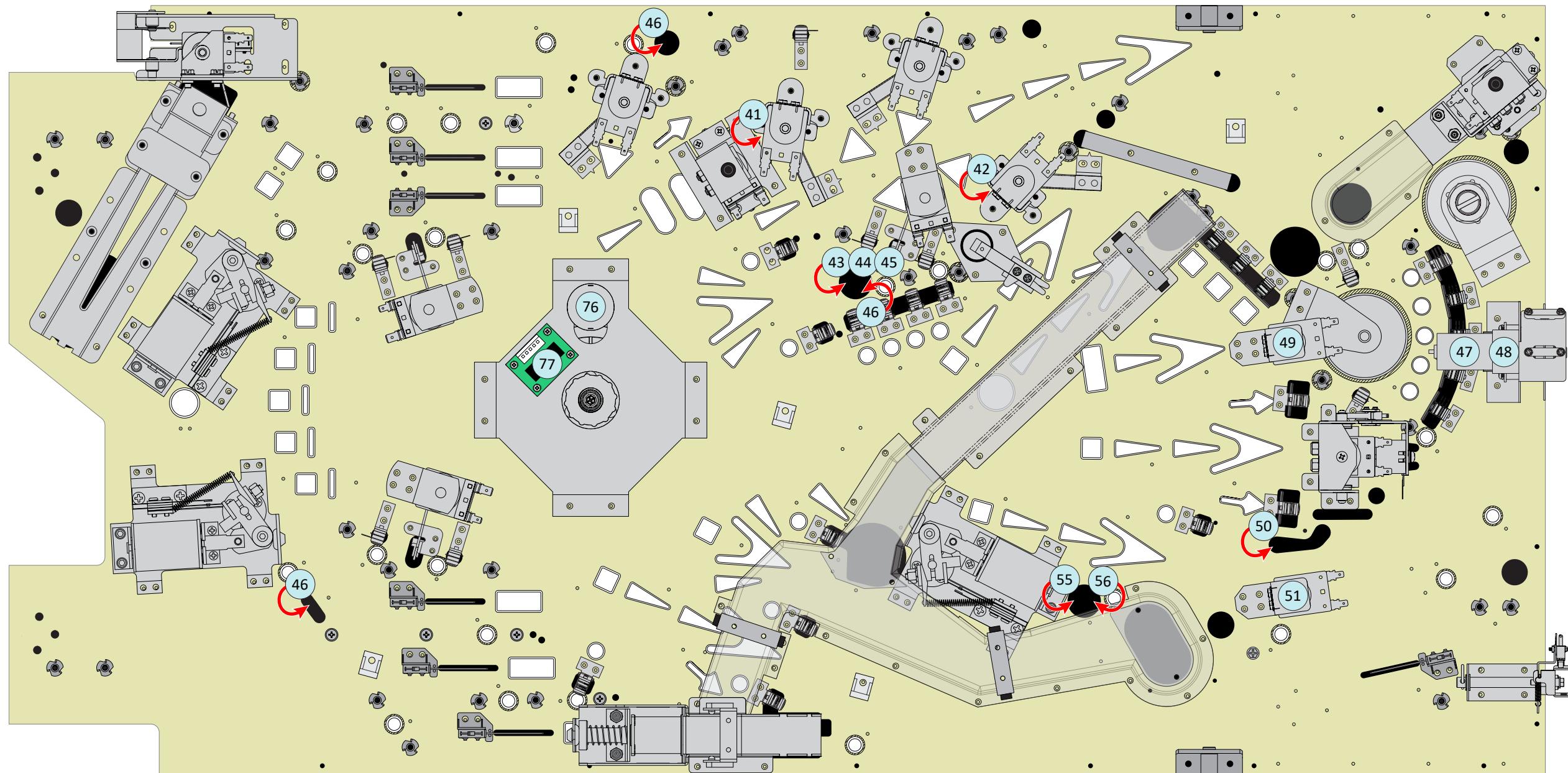
12-Volt Motor & Light Locations

Above Playfield

| Drive | Function | Part Number | Part of Assembly | Drawing |
|-------|---|---------------|------------------|------------|
| 41 | CE/LE Pirate Spinning Pop Bumper Motor | 23-005011-00 | 51-000091-00 | C-32 |
| 42 | CE/LE Barrel Spinning Pop Bumper Motor | 23-005011-00 | 51-000091-10 | C-33 |
| 43 | Ramp LED Strip, RED | 24-000030-00 | 52-000076-00 | C-64 |
| 44 | Ramp LED Strip, GRN | 24-000030-00 | 52-000076-00 | C-64 |
| 45 | Ramp LED Strip, BLU | 24-000030-00 | 52-000076-00 | C-64 |
| 46 | Spotlights (5 ea) | 24-000017-01 | - | - |
| 47 | Black Pearl Mini PF Rock Motor | 23-005001-00 | 52-000068-00 | C-54 |
| 48 | Black Pearl Mini PF Rock Relay | 160-000000-0T | 15-000009-00 | C-54, D-86 |
| 73 | Shaker Motor | 23-005003-00 | 51-005027-01 | C-39 |
| 74 | CE Topper Light (top of backbox) | 24-000001-23 | 51-005052-00 | C-4, C-70 |
| LE | Topper Light (top of backbox) | 24-000001-13 | 51-006010-00 | C-4 |
| 75 | Redemption Ticket Motor (under cabinet) | - | - | - |
| 76 | Spinning Map Disc Motor | 23-005012-00 | 52-000071-10 | C-56 |
| 77 | Spinning Map Disc Relay | 160-000000-0T | 15-000009-00 | C-56, D-86 |
| 79 | Start Button Light (front of cabinet) | 24-000017-00 | 18-007023-04 | - |
| 80 | CE Topper Motor Drive (top of backbox) | 23-005001-00 | 51-005052-00 | C-4, C-70 |

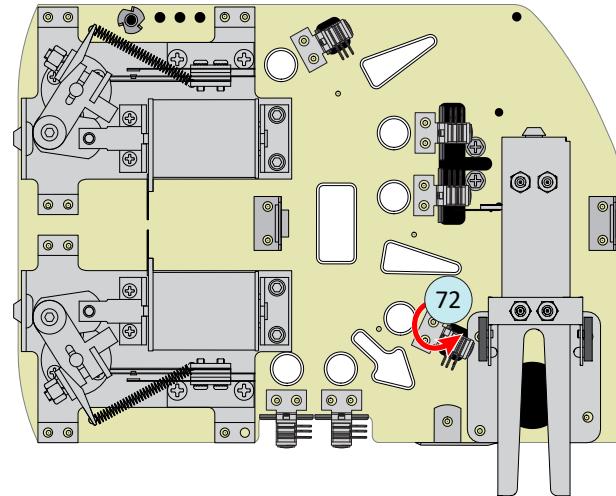


(20V/12V device wiring tables on pg C-155)



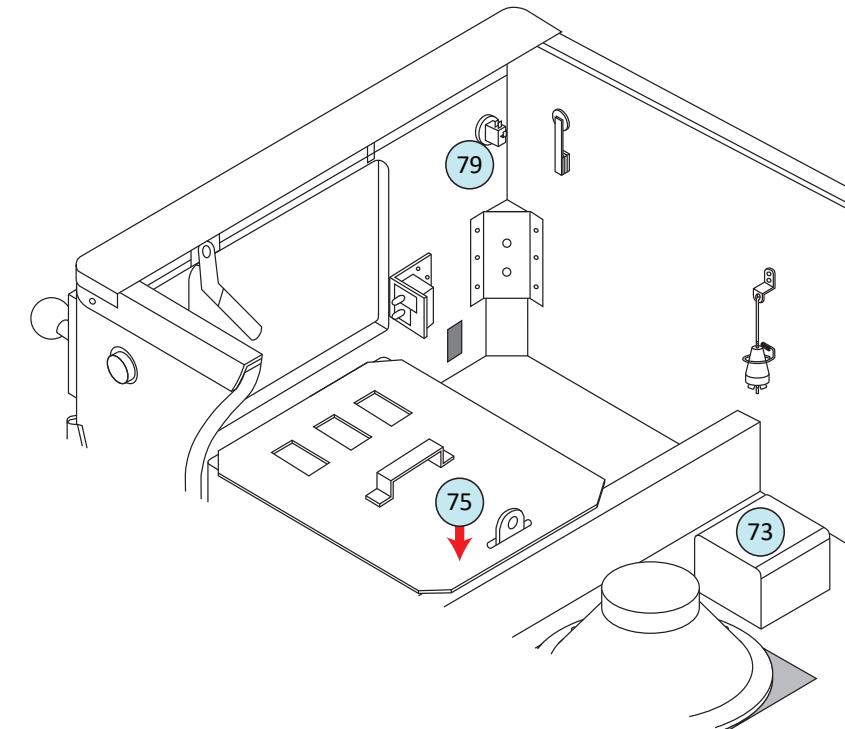
20-Volt Coil Locations *Under Playfield*

| Drive | Function | Part Number | Part of Assembly | Drawing |
|-------|-----------------------------------|--------------|------------------|---------|
| 49 | Chapter Select Up Post | 23-000010-00 | 51-000030-10 | C-26 |
| 50 | 3-Ball Chest Lock Release | 23-003008-01 | 52-000074-00 | C-60 |
| 51 | Left Orbit Up Post | 23-000010-00 | 51-000030-10 | C-26 |
| 55 | Maelstrom Ramp Diverter | 23-003008-01 | 52-000075-00 | C-62 |
| 56 | Left Turnaround Loop Diverter | 23-003008-01 | 51-005051-00 | C-50 |
| 72 | Black Pearl Cannon Load Door Lock | 23-003008-01 | 52-000072-00 | C-57 |

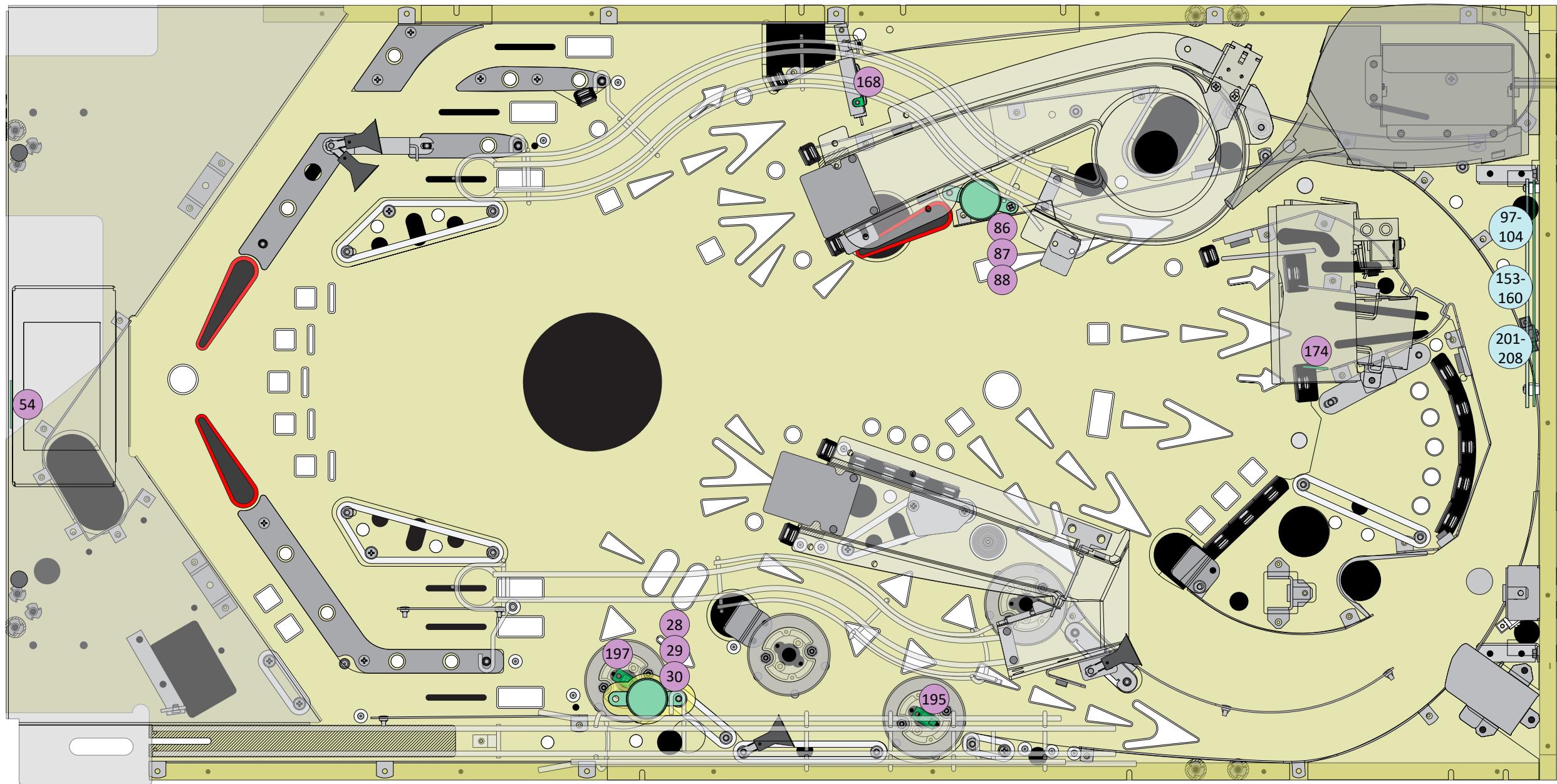


12-Volt Motor & Light Locations *Under Playfield*

| Drive | Function | Part Number | Part of Assembly | Drawing |
|-------|----------|---|------------------|--------------|
| 41 | CE/LE | Pirate Spinning Pop Bumper Motor | 23-005011-00 | 51-000091-00 |
| 42 | CE/LE | Barrel Spinning Pop Bumper Motor | 23-005011-00 | 51-000091-10 |
| 43 | | Ramp LED Strip, RED | 24-000030-00 | 52-000076-00 |
| 44 | | Ramp LED Strip, GRN | 24-000030-00 | 52-000076-00 |
| 45 | | Ramp LED Strip, BLU | 24-000030-00 | 52-000076-00 |
| 46 | | Spotlights (5 ea) | 24-000017-01 | - |
| 47 | | Black Pearl Mini PF Rock Motor | 23-005001-00 | 52-000068-00 |
| 48 | | Black Pearl Mini PF Rock Relay | 160-000000-0T | 15-000009-00 |
| 73 | | Shaker Motor | 23-005003-00 | 51-005027-01 |
| 74 | CE | Topper Light (top of backbox) | 24-000001-23 | 51-005052-00 |
| | LE | Topper Light (top of backbox) | 24-000001-13 | 51-006010-00 |
| 75 | | Redemption Ticket Motor (under cabinet) | - | - |
| 76 | | Spinning Map Disc Motor | 23-005012-00 | 52-000071-10 |
| 77 | | Spinning Map Disc Relay | 160-000000-0T | 15-000009-00 |
| 79 | | Start Button Light (front of cabinet) | 24-000017-00 | 18-007023-04 |
| 80 | CE | Topper Motor Drive (top of backbox) | 23-005001-00 | 51-005052-00 |

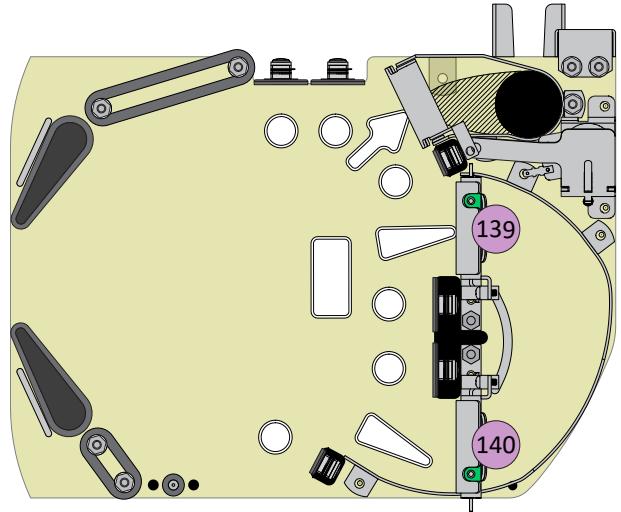


(20V/12V device wiring tables on pg C-155)



Color Key: GI Boards

RGB LED Boards

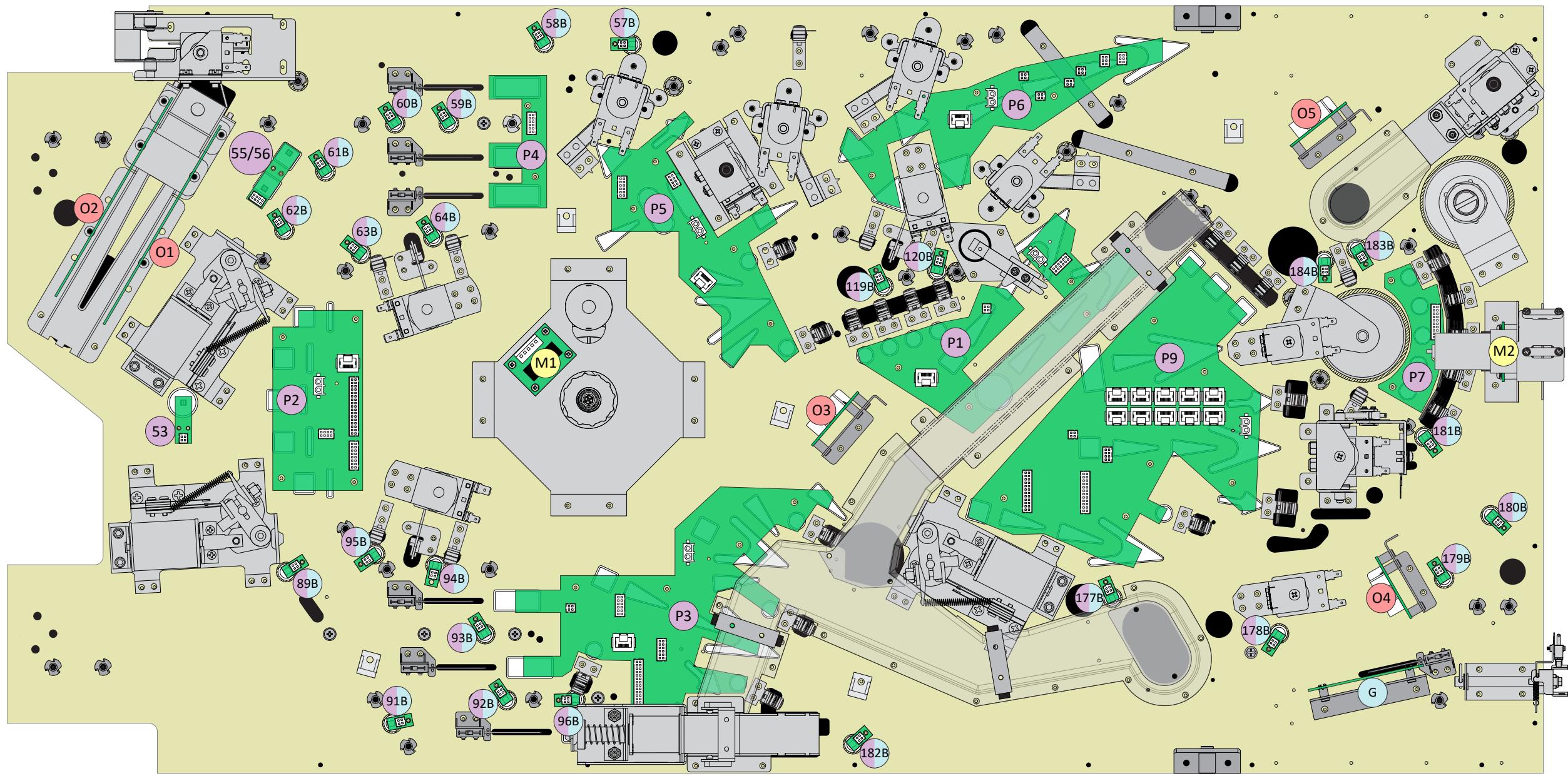


Playfield Printed Circuit Boards

Above Playfield

| Item Number | Color Key | PCB Type | Part Number | Function | Details |
|---|------------|--------------------------|--------------|-------------------------------|---------|
| 97 to 104, 153 to 160, 201 to 208 (R, G & B)* | Light Blue | Starfield/GI Board | 15-000060-00 | Back Panel Starfield Backdrop | D-43 |
| 54 | Purple | Single RGB LED Board | 15-004228-15 | Feature lighting | D-49 |
| 28 to 30 | Purple | RGB Beacon Flasher Board | 15-004064-25 | Feature lighting | D-52 |
| 86 to 88 | Purple | RGB Beacon Flasher Board | 15-004064-05 | Feature lighting | D-52 |
| 139, 140, 168, 174, 195, 197 | Purple | RGB GI Board | 15-004251-15 | Feature lighting | D-47 |

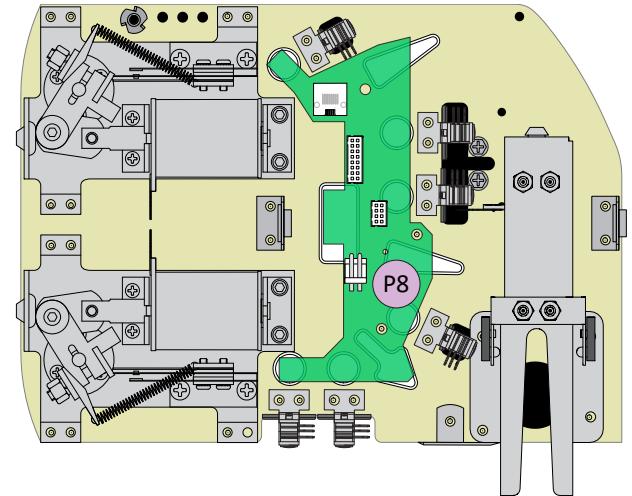
* LE & CE games only



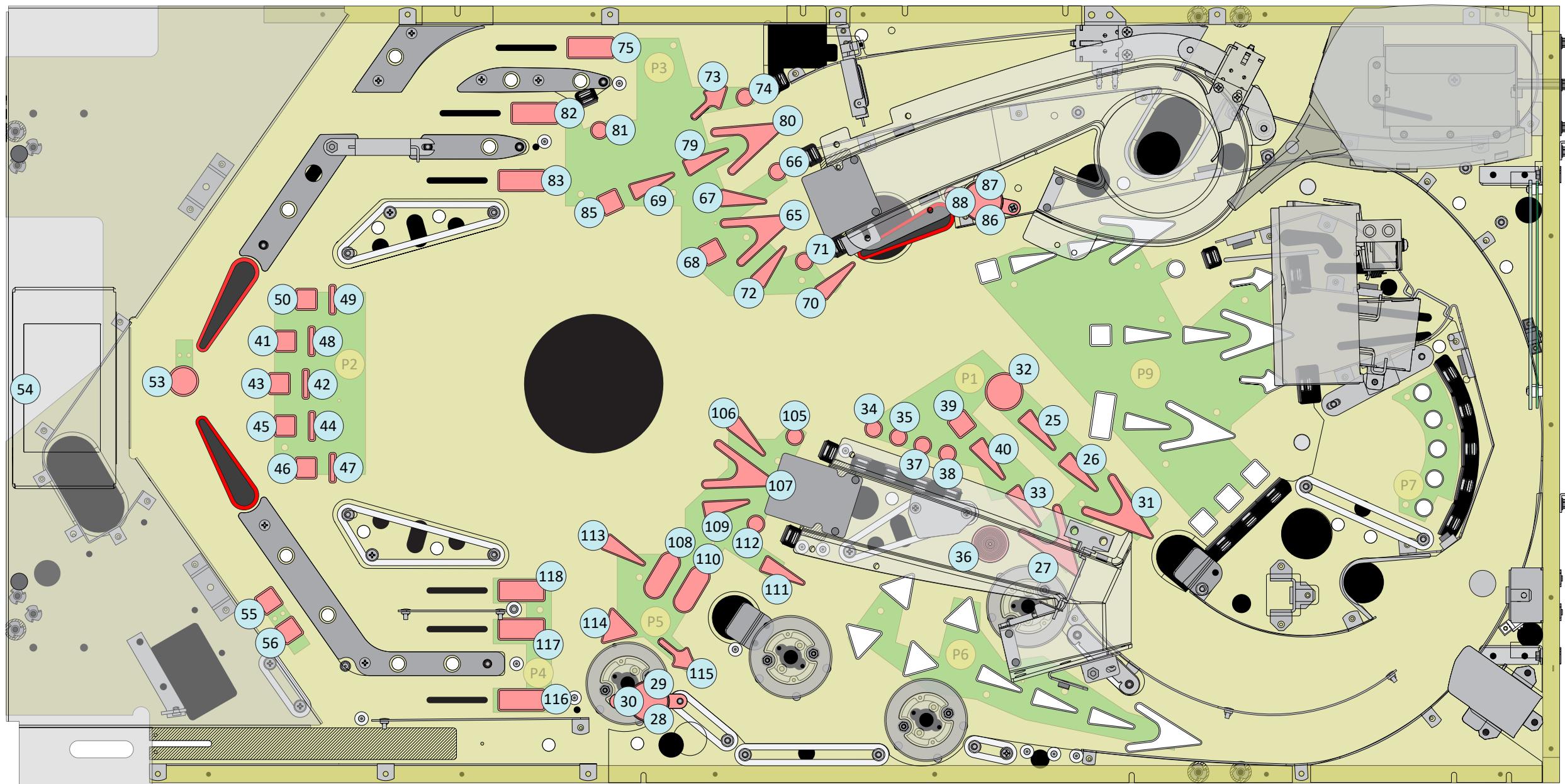
Color Key: GI Boards RGB LED Boards Opto Boards Other Boards

Playfield Printed Circuit Boards

Under Playfield



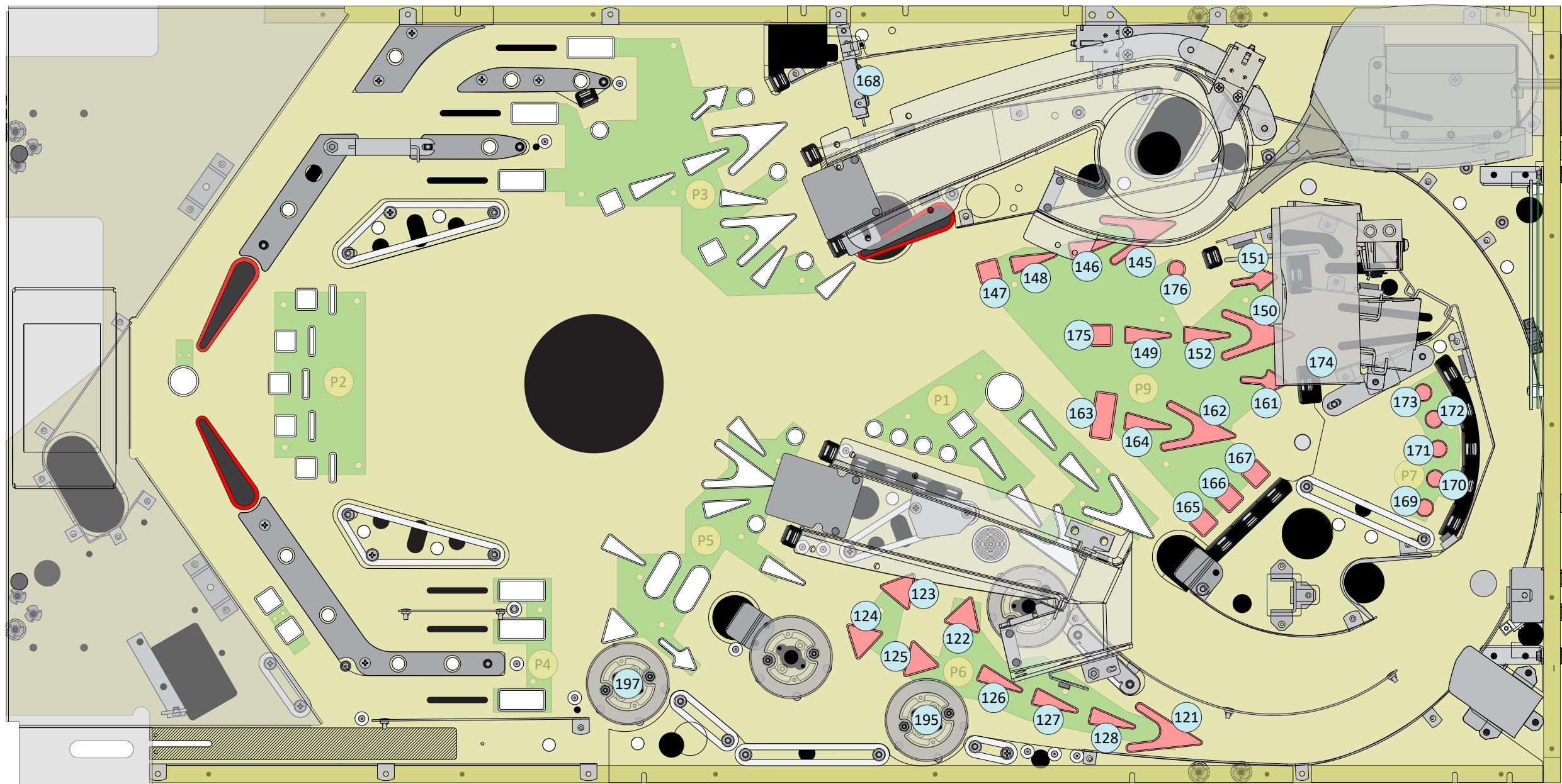
| Item Number | Color Key | PCB Type | Part Number | Function | Details |
|---|------------|--------------------------------------|--------------|---|---------|
| 57B-64B, 89B, 91B-96B, 119B, 120B, 177B-184B | Light Blue | GI LED PCB Assy | 15-004227-05 | General Illumination (Std games) | D-46 |
| 57-64, 89, 91-96, 119, 120, 177-184 | Purple | RGB GI PCB Assy | 15-004251-05 | General Illumination (LE & CE games) | D-47 |
| P1 to P9 | Purple | Main RGB LED Boards | 15-000058-0X | Feature lighting | D-12 |
| 53 | Purple | RGB LED Single Board | 15-004228-05 | Feature lighting | D-49 |
| 55/56 | Purple | RGB LED Double Board | 15-004129-05 | Feature lighting | D-50 |
| G | Light Blue | BAG Controller PCB Assy | 15-004033-03 | General illumination/flasher control | D-54 |
| O1 | Orange | 5-Ball Trough Opto Receiver Board | 15-000004-00 | 5-ball trough opto switch receivers | D-2 |
| O2 | Orange | 5-Ball Trough Opto Transmitter Board | 15-000004-01 | 5-ball trough opto switch transmitters | D-5 |
| O3, O4, O5 | Orange | Opto I/O Board | 15-000007-00 | Playfield opto switch I/O | D-7 |
| M1, M2 | Yellow | Motor Relay Board | 15-000009-00 | Motor control: map disc, mini PF rocker | D-86 |



Playfield Feature Lighting (RGB LEDs)

Above Playfield (1 of 2)

| RGB# | Location/Function | Main RGB LED Bd | RGB# | Location/Function | Main RGB LED Bd |
|------|--------------------------------------|--------------------|------|-----------------------|--------------------|
| 25 | Beckett | 15-000058-01 | 67 | Elizabeth | 15-000058-03 |
| 26 | Swann | 15-000058-01 | 68 | Left Ramp Skull | 15-000058-03 |
| 27 | Inner Orbit Jackpot | 15-000058-01 | 69 | Henry | 15-000058-03 |
| 28 | Right Beacon Flasher 1 | 15-000058-01 | 70 | Tia Dalma | 15-000058-03 |
| 29 | Right Beacon Flasher 2 | 15-000058-01 | 71 | 2X Target | 15-000058-03 |
| 30 | Right Beacon Flasher 3 | 15-000058-01 | 72 | Barbossa | 15-000058-03 |
| 31 | Map Hole Jackpot | 15-000058-01 | 73 | Special | 15-000058-03 |
| 32 | Map Ready | 15-000058-01 | 74 | 6X Target | 15-000058-03 |
| 33 | Blackbeard | 15-000058-01 | 75 | PIRATE | 15-000058-03 |
| 34 | GOLD | 15-000058-01 | 79 | Salazar | 15-000058-03 |
| 35 | GOLD | 15-000058-01 | 80 | Left Lane Jackpot | 15-000058-03 |
| 36 | Rollover Button | 15-000058-01 | 81 | Spot Character | 15-000058-03 |
| 37 | GOLD | 15-000058-01 | 82 | PIRATE | 15-000058-03 |
| 38 | GOLD | 15-000058-01 | 83 | PIRATE | 15-000058-03 |
| 39 | Inner Orbit Skull | 15-000058-01 | 85 | Left Lane Skull | 15-000058-03 |
| 40 | Angelica | 15-000058-01 | 86 | Left Beacon Flasher 1 | 15-000058-03, J302 |
| 41 | Dead Man's Chest Multiball | 15-000058-02 | 87 | Left Beacon Flasher 2 | 15-000058-03, J302 |
| 42 | At World's End Wizard Mode | 15-000058-02 | 88 | Left Beacon Flasher 3 | 15-000058-03, J302 |
| 43 | At World's End Multiball | 15-000058-02 | 105 | 3X Target | 15-000058-05 |
| 44 | On Stranger Tides Wizard Mode | 15-000058-02 | 106 | Scrum | 15-000058-05 |
| 45 | On Stranger Tides Multiball | 15-000058-02 | 107 | Right Ramp Jackpot | 15-000058-05 |
| 46 | Dead Men Tell No Tales Multiball | 15-000058-02 | 108 | Tortuga Multiball | 15-000058-05 |
| 47 | Dead Men Tell No Tales Wizard Mode | 15-000058-02 | 109 | Ragetti | 15-000058-05 |
| 48 | Dead Man's Chest Wizard Mode | 15-000058-02 | 110 | Mystery | 15-000058-05 |
| 49 | Curse Of The Black Pearl Wizard Mode | 15-000058-02 | 111 | Liar's Dice | 15-000058-05 |
| 50 | Curse Of The Black Pearl Multiball | 15-000058-02 | 112 | 5X Target | 15-000058-05 |
| 53 | Shoot Again | 15-000058-02, J204 | 113 | Gibbs | 15-000058-05 |
| 54 | Action Button (inside bottom arch) | 15-000058-02, J204 | 114 | Lower Pop Mystery | 15-000058-05 |
| 55 | Tilt Warning 1 | 15-000058-02, J204 | 115 | Extra Ball | 15-000058-05 |
| 56 | Tilt Warning 2 | 15-000058-02, J204 | 116 | PIRATE | 15-000058-04 |
| 65 | Left Ramp Jackpot | 15-000058-03 | 117 | PIRATE | 15-000058-04 |
| 66 | 4X Target | 15-000058-03 | 118 | PIRATE | 15-000058-04 |

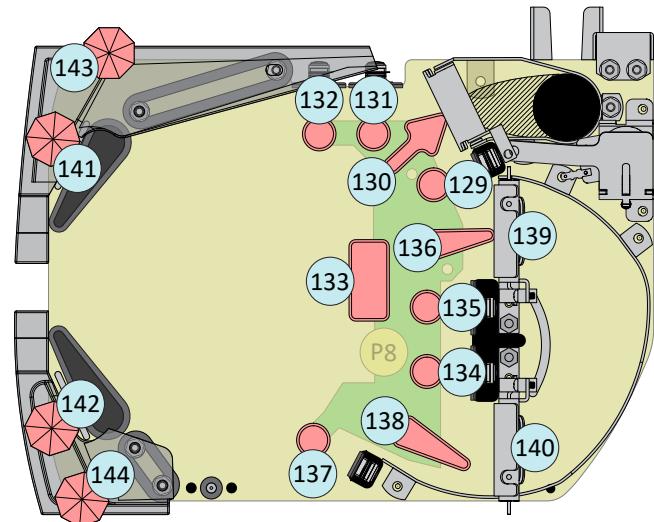


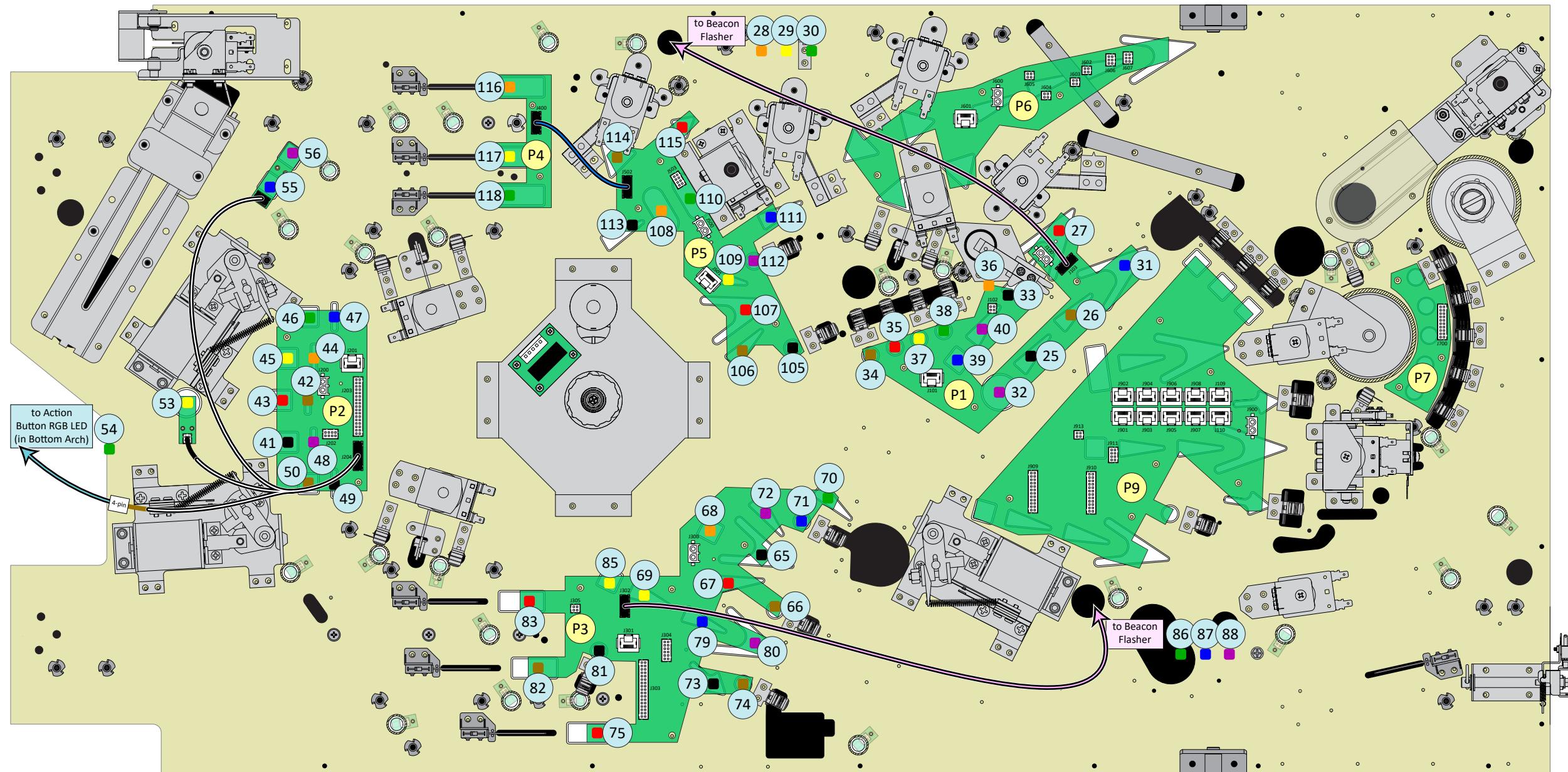
Playfield Feature Lighting (RGB LEDs)

Above Playfield (2 of 2)

| RGB# | Location/Function | Main RGB LED Bd |
|------|--|--------------------|
| 121 | Right Orbit Jackpot | 15-000058-06 |
| 122 | Top Pop Mystery | 15-000058-06 |
| 123 | Pop Sling Mystery | 15-000058-06 |
| 124 | Middle Pop Mystery | 15-000058-06 |
| 125 | Right Pop Mystery | 15-000058-06 |
| 126 | Carina | 15-000058-06 |
| 127 | Norrrington | 15-000058-06 |
| 128 | Phillip | 15-000058-06 |
| 129 | LOAD CANNON | 15-000058-08 |
| 130 | Light Fuse | 15-000058-08 |
| 131 | BONUS X | 15-000058-08 |
| 132 | BONUS X | 15-000058-08 |
| 133 | Board The Black Pearl | 15-000058-08 |
| 134 | SPOT GOLD | 15-000058-08 |
| 135 | SPOT GOLD | 15-000058-08 |
| 136 | Marty | 15-000058-08 |
| 137 | LOAD CANNON | 15-000058-08 |
| 138 | Cotton | 15-000058-08 |
| 139 | Black Pearl Left Spinner | 15-000058-08, J802 |
| 140 | Black Pearl Right Spinner | 15-000058-08, J802 |
| 141 | Black Pearl Lantern, Left Side, Inner | 15-000058-08, J803 |
| 142 | Black Pearl Lantern, Right Side, Inner | 15-000058-08, J803 |
| 143 | Black Pearl Lantern, Left Side, Outer | 15-000058-08, J803 |
| 144 | Black Pearl Lantern, Right Side, Outer | 15-000058-08, J803 |
| 145 | Left Orbit Jackpot | 15-000058-09 |
| 146 | Pintel | 15-000058-09 |
| 147 | Left Orbit Skull | 15-000058-09 |
| 148 | Will | 15-000058-09 |
| 149 | Bootstrap | 15-000058-09 |
| 150 | Treasure Chest Lane Jackpot | 15-000058-09 |
| 151 | LOAD CHEST | 15-000058-09 |
| 152 | Davy Jones | 15-000058-09 |

| RGB# | Location/Function | Main RGB LED Bd |
|------|--|--------------------|
| 161 | LOAD CHEST | 15-000058-09 |
| 162 | Center Shot Jackpot | 15-000058-09 |
| 163 | Chapter Start | 15-000058-09 |
| 164 | Jack | 15-000058-09 |
| 165 | MAP | 15-000058-09 |
| 166 | MAP | 15-000058-09 |
| 167 | MAP | 15-000058-09 |
| 168 | Left Lane Spinner | 15-000058-09, J913 |
| 169 | Chapter Select Target 5 (right) | 15-000058-09, J909 |
| 170 | Chapter Select Target 4 | 15-000058-09, J909 |
| 171 | Chapter Select Target 3 | 15-000058-09, J909 |
| 172 | Chapter Select Target 2 | 15-000058-09, J909 |
| 173 | Chapter Select Target 1 (left) | 15-000058-09, J909 |
| 174 | Treasure Chest Inside | 15-000058-09, J909 |
| 175 | Treasure Chest Lane Skull | 15-000058-09 |
| 176 | PIRATE Lanes Collect | 15-000058-09 |
| 194 | Upper Pop Bumper (Std games only) | 15-000058-06, J602 |
| 195 | Upper Middle Pop Bumper | 15-000058-06, J603 |
| 196 | Lower Middle Pop Bumper (Std games only) | 15-000058-06, J604 |
| 197 | Lower Pop Bumper | 15-000058-06, J605 |

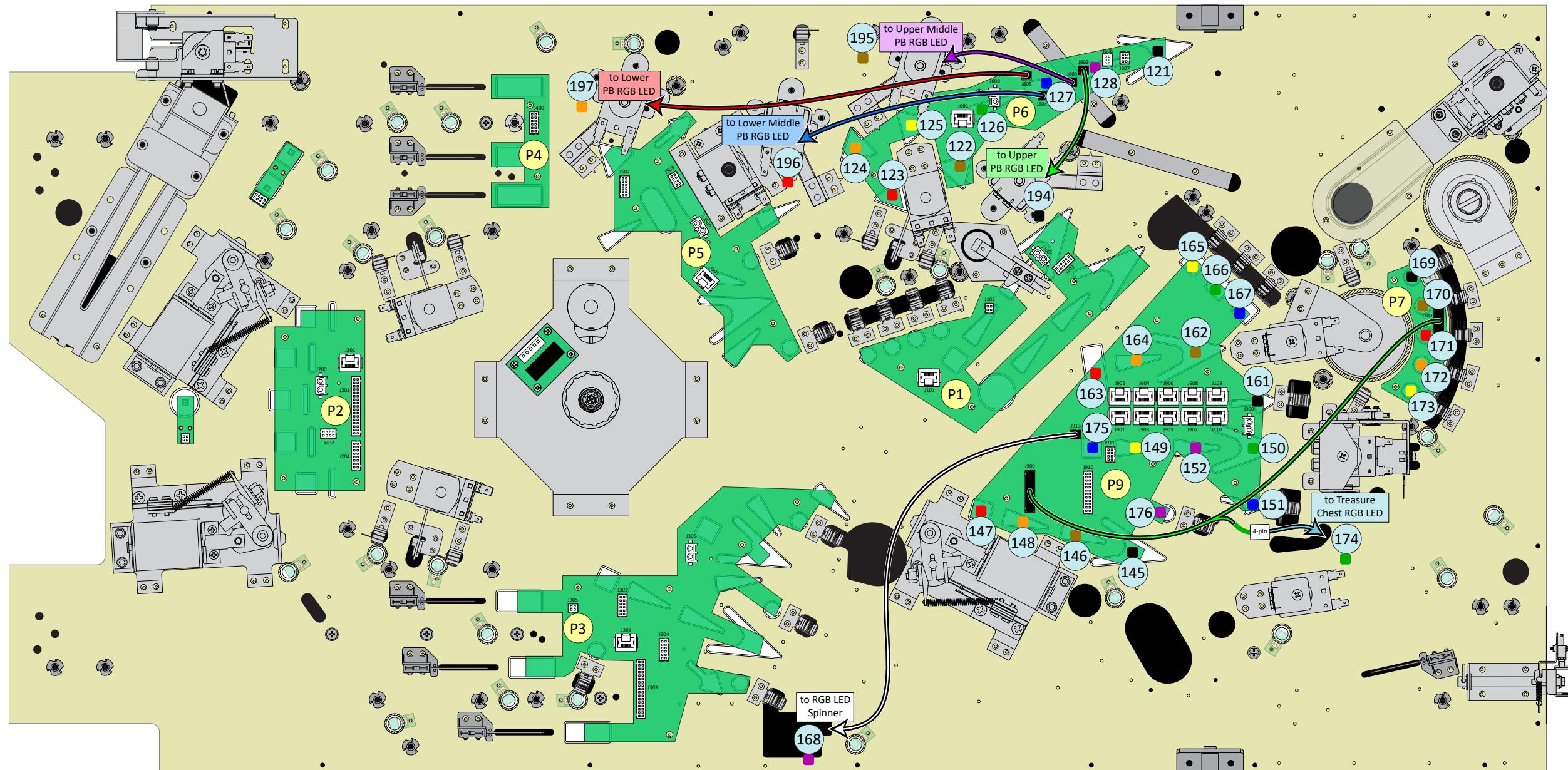




Playfield Feature Lighting (RGB LEDs)

Under Playfield (1 of 2)

| RGB# | Location/Function | Main RGB LED Bd | RGB# | Location/Function | Main RGB LED Bd |
|------|--------------------------------------|--------------------|------|-----------------------|--------------------|
| 25 | Beckett | 15-000058-01 | 67 | Elizabeth | 15-000058-03 |
| 26 | Swann | 15-000058-01 | 68 | Left Ramp Skull | 15-000058-03 |
| 27 | Inner Orbit Jackpot | 15-000058-01 | 69 | Henry | 15-000058-03 |
| 28 | Right Beacon Flasher 1 | 15-000058-01 | 70 | Tia Dalma | 15-000058-03 |
| 29 | Right Beacon Flasher 2 | 15-000058-01 | 71 | 2X Target | 15-000058-03 |
| 30 | Right Beacon Flasher 3 | 15-000058-01 | 72 | Barbossa | 15-000058-03 |
| 31 | Map Hole Jackpot | 15-000058-01 | 73 | Special | 15-000058-03 |
| 32 | Map Ready | 15-000058-01 | 74 | 6X Target | 15-000058-03 |
| 33 | Blackbeard | 15-000058-01 | 75 | PIRATE | 15-000058-03 |
| 34 | GOLD | 15-000058-01 | 79 | Salazar | 15-000058-03 |
| 35 | GOLD | 15-000058-01 | 80 | Left Lane Jackpot | 15-000058-03 |
| 36 | Rollover Button | 15-000058-01 | 81 | Spot Character | 15-000058-03 |
| 37 | GOLD | 15-000058-01 | 82 | PIRATE | 15-000058-03 |
| 38 | GOLD | 15-000058-01 | 83 | PIRATE | 15-000058-03 |
| 39 | Inner Orbit Skull | 15-000058-01 | 85 | Left Lane Skull | 15-000058-03 |
| 40 | Angelica | 15-000058-01 | 86 | Left Beacon Flasher 1 | 15-000058-03, J302 |
| 41 | Dead Man's Chest Multiball | 15-000058-02 | 87 | Left Beacon Flasher 2 | 15-000058-03, J302 |
| 42 | At World's End Wizard Mode | 15-000058-02 | 88 | Left Beacon Flasher 3 | 15-000058-03, J302 |
| 43 | At World's End Multiball | 15-000058-02 | 105 | 3X Target | 15-000058-05 |
| 44 | On Stranger Tides Wizard Mode | 15-000058-02 | 106 | Scrum | 15-000058-05 |
| 45 | On Stranger Tides Multiball | 15-000058-02 | 107 | Right Ramp Jackpot | 15-000058-05 |
| 46 | Dead Men Tell No Tales Multiball | 15-000058-02 | 108 | Tortuga Multiball | 15-000058-05 |
| 47 | Dead Men Tell No Tales Wizard Mode | 15-000058-02 | 109 | Ragetti | 15-000058-05 |
| 48 | Dead Man's Chest Wizard Mode | 15-000058-02 | 110 | Mystery | 15-000058-05 |
| 49 | Curse Of The Black Pearl Wizard Mode | 15-000058-02 | 111 | Liar's Dice | 15-000058-05 |
| 50 | Curse Of The Black Pearl Multiball | 15-000058-02 | 112 | 5X Target | 15-000058-05 |
| 53 | Shoot Again | 15-000058-02, J204 | 113 | Gibbs | 15-000058-05 |
| 54 | Action Button (inside bottom arch) | 15-000058-02, J204 | 114 | Lower Pop Mystery | 15-000058-05 |
| 55 | Tilt Warning 1 | 15-000058-02, J204 | 115 | Extra Ball | 15-000058-05 |
| 56 | Tilt Warning 2 | 15-000058-02, J204 | 116 | PIRATE | 15-000058-04 |
| 65 | Left Ramp Jackpot | 15-000058-03 | 117 | PIRATE | 15-000058-04 |
| 66 | 4X Target | 15-000058-03 | 118 | PIRATE | 15-000058-04 |

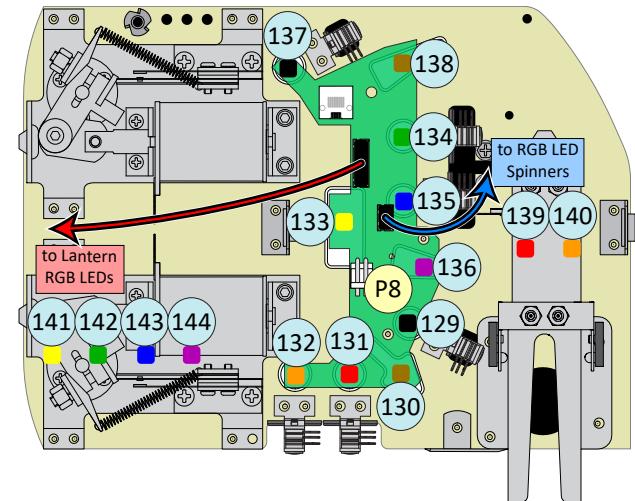


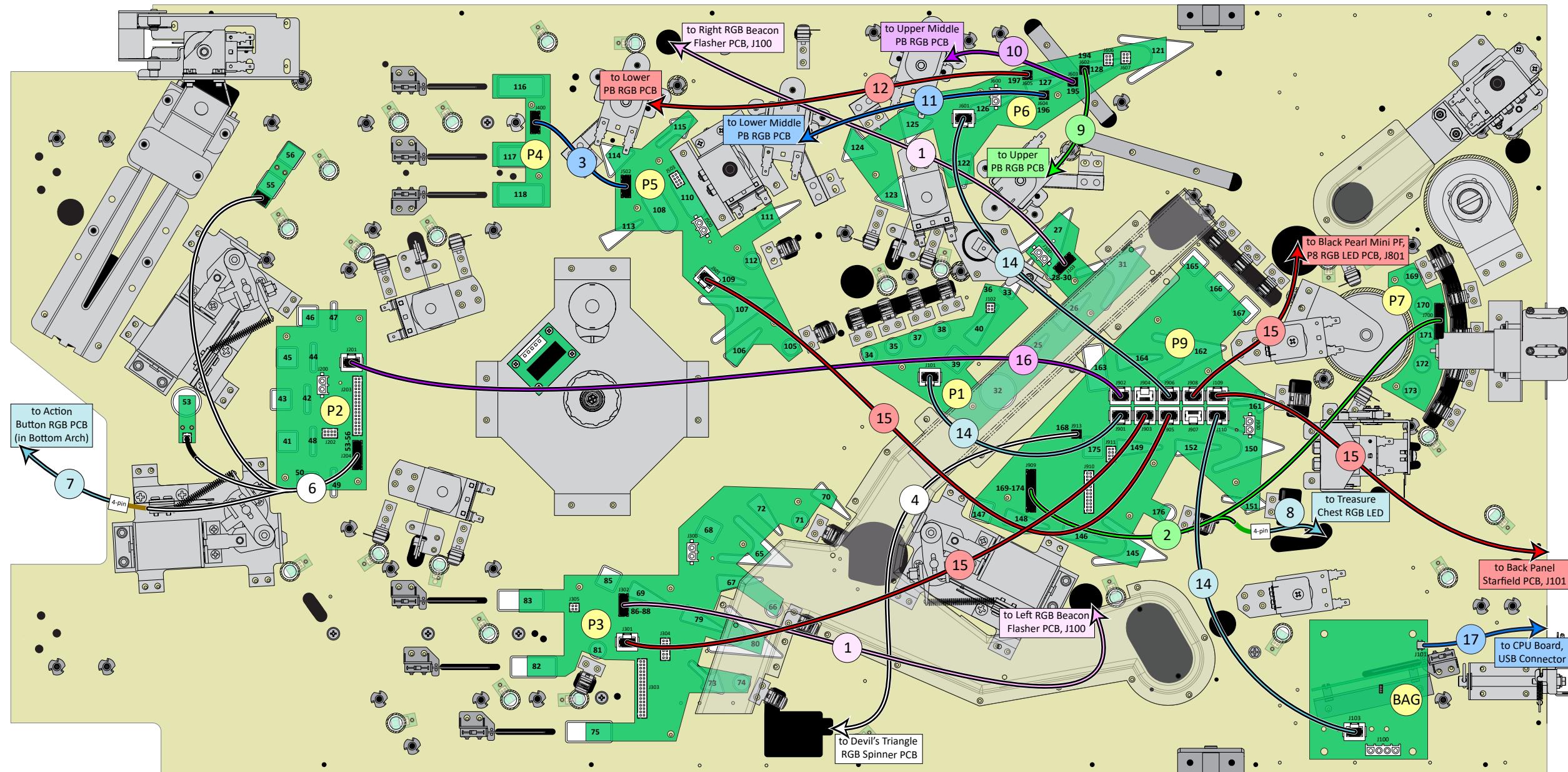
Playfield Feature Lighting (RGB LEDs)

Under Playfield (2 of 2)

| RGB# | Location/Function | Main RGB LED Bd |
|------|--|--------------------|
| 121 | Right Orbit Jackpot | 15-000058-06 |
| 122 | Top Pop Mystery | 15-000058-06 |
| 123 | Pop Sling Mystery | 15-000058-06 |
| 124 | Middle Pop Mystery | 15-000058-06 |
| 125 | Right Pop Mystery | 15-000058-06 |
| 126 | Carina | 15-000058-06 |
| 127 | Norrrington | 15-000058-06 |
| 128 | Phillip | 15-000058-06 |
| 129 | LOAD CANNON | 15-000058-08 |
| 130 | Light Fuse | 15-000058-08 |
| 131 | BONUS X | 15-000058-08 |
| 132 | BONUS X | 15-000058-08 |
| 133 | Board The Black Pearl | 15-000058-08 |
| 134 | SPOT GOLD | 15-000058-08 |
| 135 | SPOT GOLD | 15-000058-08 |
| 136 | Marty | 15-000058-08 |
| 137 | LOAD CANNON | 15-000058-08 |
| 138 | Cotton | 15-000058-08 |
| 139 | Black Pearl Left Spinner | 15-000058-08, J802 |
| 140 | Black Pearl Right Spinner | 15-000058-08, J802 |
| 141 | Black Pearl Lantern, Left Side, Inner | 15-000058-08, J803 |
| 142 | Black Pearl Lantern, Right Side, Inner | 15-000058-08, J803 |
| 143 | Black Pearl Lantern, Left Side, Outer | 15-000058-08, J803 |
| 144 | Black Pearl Lantern, Right Side, Outer | 15-000058-08, J803 |
| 145 | Left Orbit Jackpot | 15-000058-09 |
| 146 | Pintel | 15-000058-09 |
| 147 | Left Orbit Skull | 15-000058-09 |
| 148 | Will | 15-000058-09 |
| 149 | Bootstrap | 15-000058-09 |
| 150 | Treasure Chest Lane Jackpot | 15-000058-09 |
| 151 | LOAD CHEST | 15-000058-09 |
| 152 | Davy Jones | 15-000058-09 |

| RGB# | Location/Function | Main RGB LED Bd |
|------|--|--------------------|
| 161 | LOAD CHEST | 15-000058-09 |
| 162 | Center Shot Jackpot | 15-000058-09 |
| 163 | Chapter Start | 15-000058-09 |
| 164 | Jack | 15-000058-09 |
| 165 | MAP | 15-000058-09 |
| 166 | MAP | 15-000058-09 |
| 167 | MAP | 15-000058-09 |
| 168 | Left Lane Spinner | 15-000058-09, J913 |
| 169 | Chapter Select Target 5 (right) | 15-000058-09, J909 |
| 170 | Chapter Select Target 4 | 15-000058-09, J909 |
| 171 | Chapter Select Target 3 | 15-000058-09, J909 |
| 172 | Chapter Select Target 2 | 15-000058-09, J909 |
| 173 | Chapter Select Target 1 (left) | 15-000058-09, J909 |
| 174 | Treasure Chest Inside | 15-000058-09, J909 |
| 175 | Treasure Chest Lane Skull | 15-000058-09 |
| 176 | PIRATE Lanes Collect | 15-000058-09 |
| 194 | Upper Pop Bumper (Std games only) | 15-000058-06, J602 |
| 195 | Upper Middle Pop Bumper | 15-000058-06, J603 |
| 196 | Lower Middle Pop Bumper (Std games only) | 15-000058-06, J604 |
| 197 | Lower Pop Bumper | 15-000058-06, J605 |

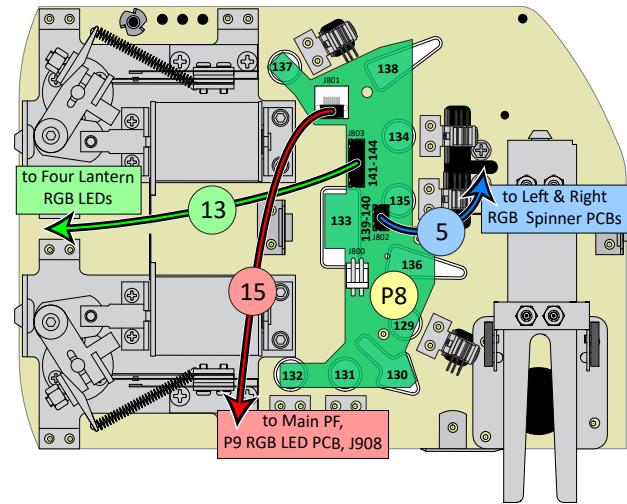


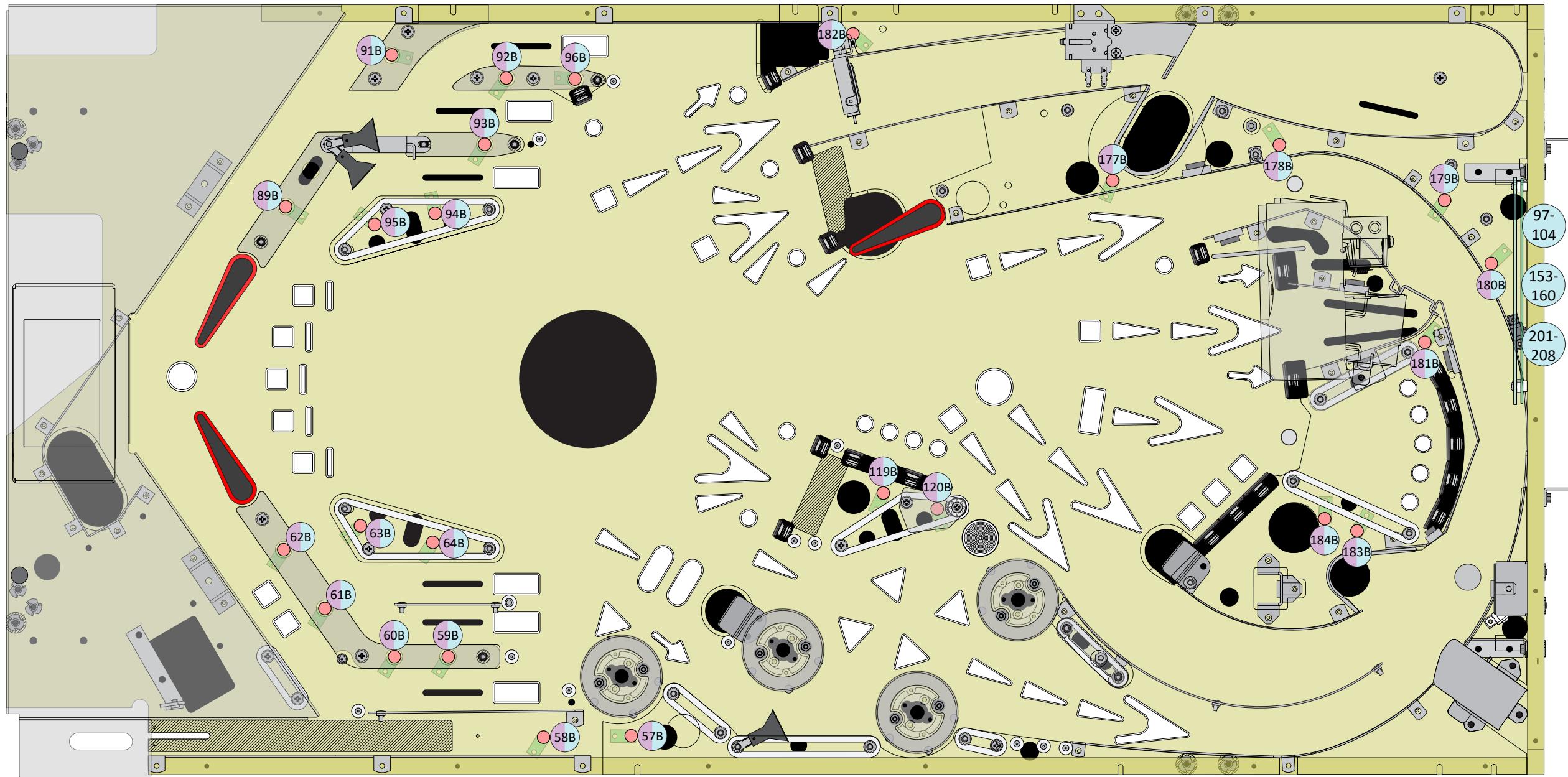


RGB LED Feature Lighting Wiring

Under Playfield

| Cable | Part Number | Description | Main RGB LED Bd Connection(s) | Details |
|-------|------------------|--|---|--------------------------|
| 1 | 19-009038-00 | POTC Beacon Flasher RGB LED Cable (2 ea) | P1/J103 P3/J302 | D-13, D-14 D-21, D-22 |
| 2 | 19-009038-01 | POTC Buried Magnet Area RGB LED Cable | P9/J909 P7/J700 | D-39, D-41 D-32, D-33 |
| 3 | 19-009038-02 | POTC Right In/Outlanes RGB LED Cable | P4/J400 P5/J502 | D-24, D-25 D-27, D-28 |
| 4 | 19-009038-03 | POTC Main PF RGB LED Spinner Cable | P9/J913 | D-38, D-42 |
| 5 | 19-009038-04 | POTC Black Pearl Mini PF RGB LED Spinners Cable | P8/J802 | D-35, D-36 |
| 6 | 19-009038-05 | POTC Lower Main PF/Action Button RGB LED Cable | P2/J204 | D-16, D-18 |
| 7 | 19-009038-06 | POTC Action Button RGB LED Cable | P2/J204 | D-16, D-18 |
| 8 | 19-009038-07 | POTC Treasure Chest RGB LED Cable | P9/J909 | D-39, D-41 |
| 9 | Std 19-009038-08 | POTC Upper Pop Bumper RGB LED Cable | P6/J602 | D-30, D-31 |
| 10 | 19-009038-09 | POTC Upper Middle Pop Bumper RGB LED Cable | P6/J603 | D-30, D-31 |
| 11 | Std 19-009038-10 | POTC Lower Middle Pop Bumper RGB LED Cable | P6/J604 | D-30, D-31 |
| 12 | 19-009038-11 | POTC Lower Pop Bumper RGB LED Cable | P6/J605 | D-30, D-31 |
| 13 | 19-009038-13 | POTC Black Pearl Railing RGB LED Cable | P8/J803 | D-35, D-36 |
| 14 | 19-003111-01 | Ethernet Cable, Cat5E, Shielded, 1ft (3 ea) | BAG/J103 - P9/J110 P1/J101 - P9/J901 P6/J601 - P9/J906 | - - - |
| 15 | 19-003111-02 | Ethernet Cable, Cat5E, Shielded, 2ft (4 ea LE/CE; 3 ea Std) | P3/J301 - P9/J903 P5/J501 - P9/J905 P8/J801 - P9/J908 Starfield/J101 - P9/J109 | - - - - |
| LE/CE | | | | |
| 16 | 19-003111-03 | Ethernet Cable, Cat5E, Shielded, 3ft | P2/J201 - P9/J902 | - |
| 17 | 19-003124-07 | USB Cable, 2.0A to Right Angle Mini-B, M-M, Shielded, 7.5 ft | BAG/J101 - CPU/USB Port | - |



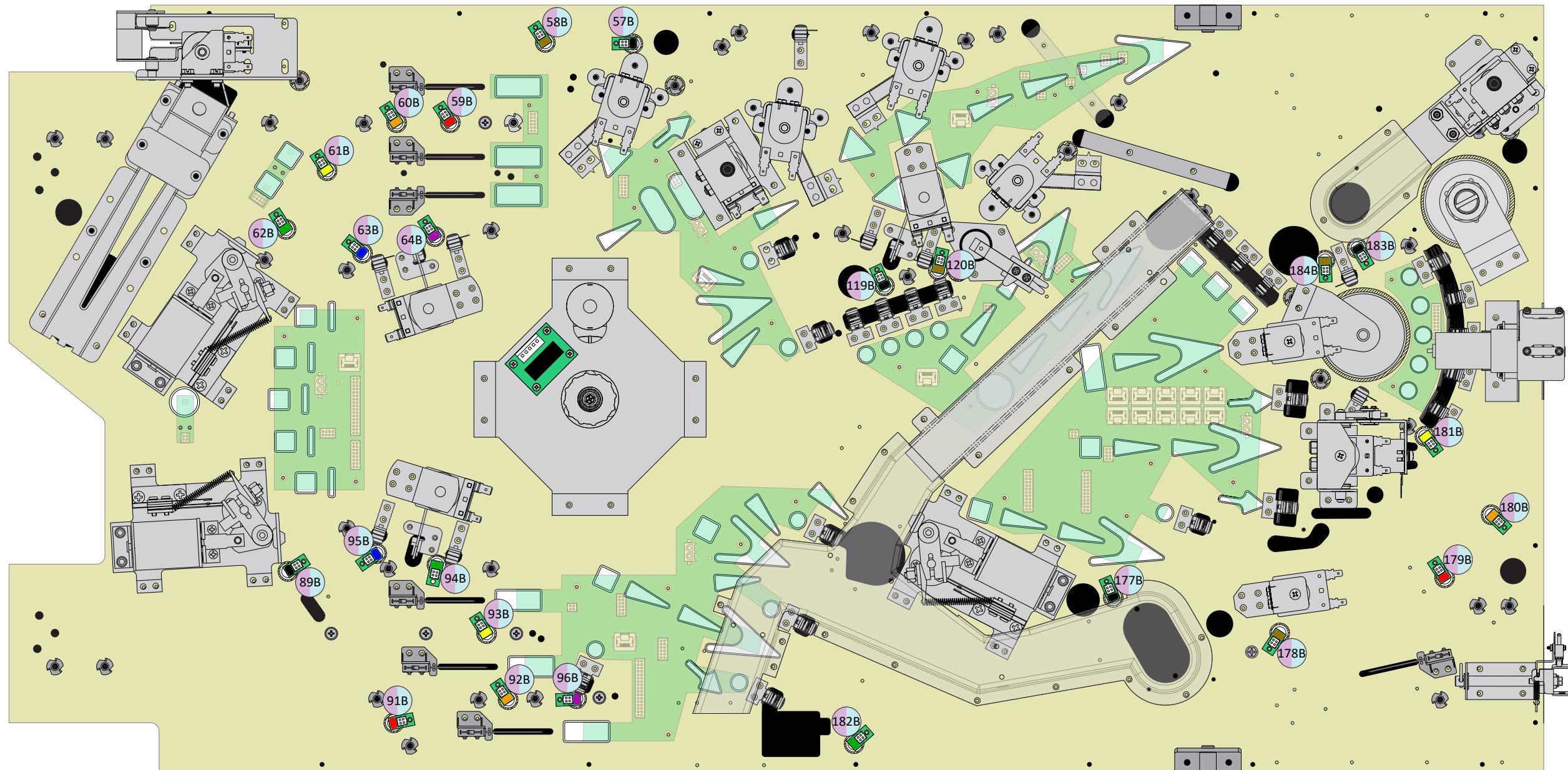


Playfield GI Lighting (RGB or White LEDs)

Above Playfield

| LED# | Location/Function | Main RGB LED Bd Connection | Details | LED# | Location/Function | Main RGB LED Bd Connection | Details |
|------|-------------------------------------|-------------------------------|------------|---------|------------------------------------|-------------------------------|------------|
| 57B | Shooter Lane, High | P2/J203 | D-16, D-17 | 97-104 | Starfield PCB (LE & CE games only) | - | D-44 |
| 58B | Shooter Lane, Low | P2/J203 | D-16, D-17 | 119B | Upper Sling, Low | P5/J503 | D-27, D-28 |
| 59B | Right Outlane Guide, High | P2/J203 | D-16, D-17 | 120B | Upper Sling, High | P5/J503 | D-27, D-28 |
| 60B | Right Outlane Guide, Low | P2/J203 | D-16, D-17 | 153-160 | Starfield PCB (LE & CE games only) | - | D-44 |
| 61B | Right Flipper Guide, High | P2/J203 | D-16, D-17 | 177B | Left Orbit Enter, Low | P9/J910 | D-39, D-41 |
| 62B | Right Flipper Guide, Low | P2/J203 | D-16, D-17 | 178B | Left Orbit Enter, Mid | P9/J910 | D-39, D-41 |
| 63B | Right Sling, Low | P2/J203 | D-16, D-17 | 179B | Treasure Chest, Left | P9/J910 | D-39, D-41 |
| 64B | Right Sling, High | P2/J203 | D-16, D-17 | 180B | Treasure Chest, Top | P9/J910 | D-39, D-41 |
| 89B | Left Flipper Guide, Low | P3/J303 | D-21, D-22 | 181B | Treasure Chest, Right | P9/J910 | D-39, D-41 |
| 90B | Left Flipper Guide, High (not used) | P3/J303 | D-21, D-22 | 182B | Left Turnaround Loop, Mid | P9/J910 | D-39, D-41 |
| 91B | Left Return Lane Guide | P3/J303 | D-21, D-22 | 183B | Chapter Start, Right, High | P9/J911 | D-39, D-42 |
| 92B | Left Outlane Guide, Low | P3/J303 | D-21, D-22 | 184B | Chapter Start, Right, Low | P9/J911 | D-39, D-42 |
| 93B | Left Inlane Guide | P3/J303 | D-21, D-22 | 201-208 | Starfield PCB (LE & CE games only) | - | D-44 |
| 94B | Left Sling, High | P3/J303 | D-21, D-22 | | | | |
| 95B | Left Sling, Low | P3/J303 | D-21, D-22 | | | | |
| 96B | Left Outlane Guide, High | P3/J303 | D-21, D-22 | | | | |

Note: Std games (white GI LEDs) use only the 'B' control/return line for each LED#, whereas CE/LE games (RGB GI LEDs) use all three control/return lines: 'B', 'R' & 'G' for each LED#.

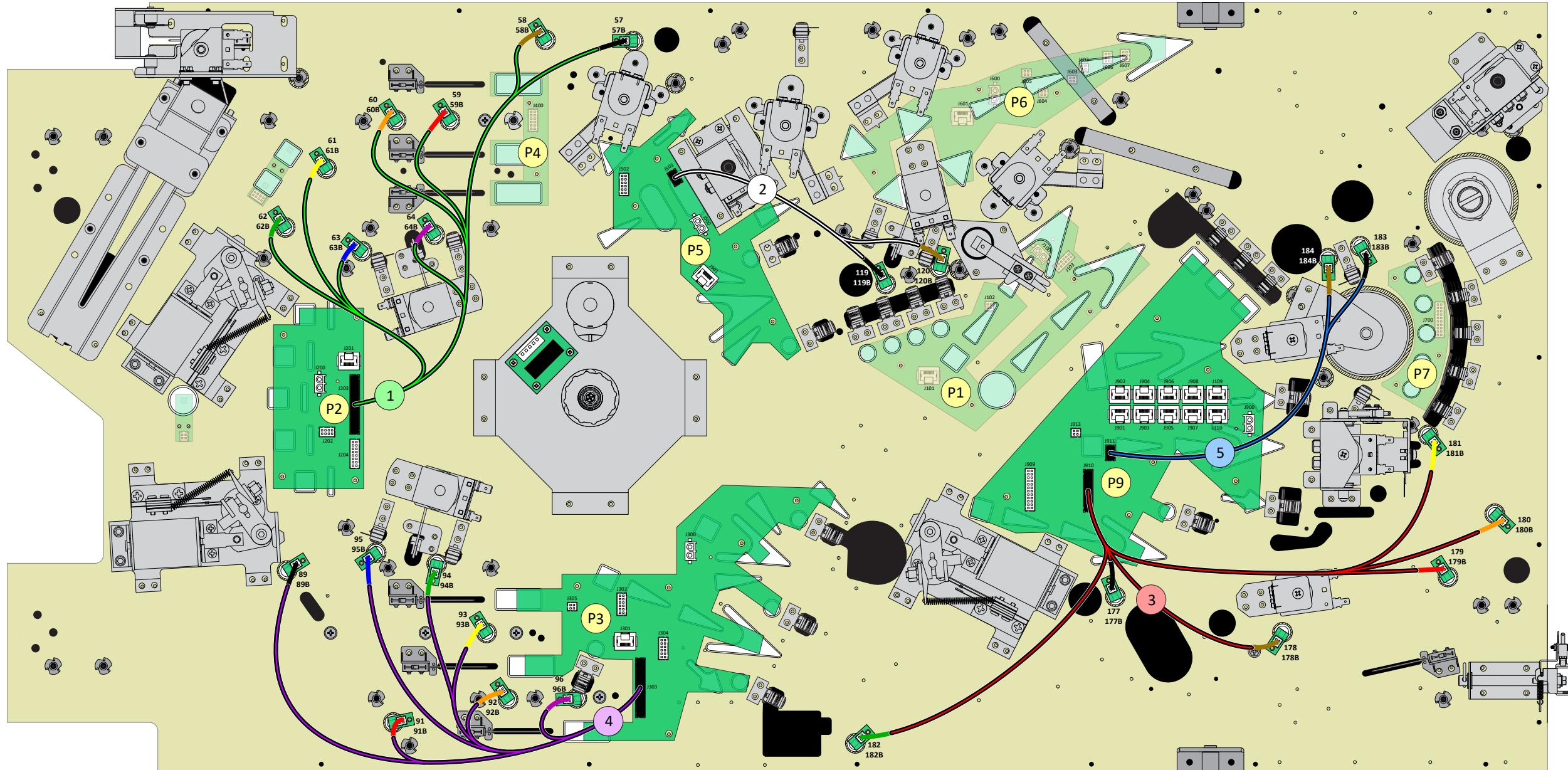


Playfield GI Lighting (RGB or White LEDs)

Under Playfield

| LED# | Location/Function | Main RGB LED | Bd Connection | Details | LED# | Location/Function | Main RGB LED | Bd Connection | Details |
|------|-------------------------------------|--------------|---------------|------------|------|----------------------------|--------------|---------------|------------|
| 57B | Shooter Lane, High | | P2/J203 | D-16, D-17 | 119B | Upper Sling, Low | | P5/J503 | D-27, D-28 |
| 58B | Shooter Lane, Low | | P2/J203 | D-16, D-17 | 120B | Upper Sling, High | | P5/J503 | D-27, D-28 |
| 59B | Right Outlane Guide, High | | P2/J203 | D-16, D-17 | 177B | Left Orbit Enter, Low | | P9/J910 | D-39, D-41 |
| 60B | Right Outlane Guide, Low | | P2/J203 | D-16, D-17 | 178B | Left Orbit Enter, Mid | | P9/J910 | D-39, D-41 |
| 61B | Right Flipper Guide, High | | P2/J203 | D-16, D-17 | 179B | Treasure Chest, Left | | P9/J910 | D-39, D-41 |
| 62B | Right Flipper Guide, Low | | P2/J203 | D-16, D-17 | 180B | Treasure Chest, Top | | P9/J910 | D-39, D-41 |
| 63B | Right Sling, Low | | P2/J203 | D-16, D-17 | 181B | Treasure Chest, Right | | P9/J910 | D-39, D-41 |
| 64B | Right Sling, High | | P2/J203 | D-16, D-17 | 182B | Left Turnaround Loop, Mid | | P9/J910 | D-39, D-41 |
| 89B | Left Flipper Guide, Low | | P3/J303 | D-21, D-22 | 183B | Chapter Start, Right, High | | P9/J911 | D-39, D-42 |
| 90B | Left Flipper Guide, High (not used) | | P3/J303 | D-21, D-22 | 184B | Chapter Start, Right, Low | | P9/J911 | D-39, D-42 |
| 91B | Left Return Lane Guide | | P3/J303 | D-21, D-22 | | | | | |
| 92B | Left Outlane Guide, Low | | P3/J303 | D-21, D-22 | | | | | |
| 93B | Left Inlane Guide | | P3/J303 | D-21, D-22 | | | | | |
| 94B | Left Sling, High | | P3/J303 | D-21, D-22 | | | | | |
| 95B | Left Sling, Low | | P3/J303 | D-21, D-22 | | | | | |
| 96B | Left Outlane Guide, High | | P3/J303 | D-21, D-22 | | | | | |

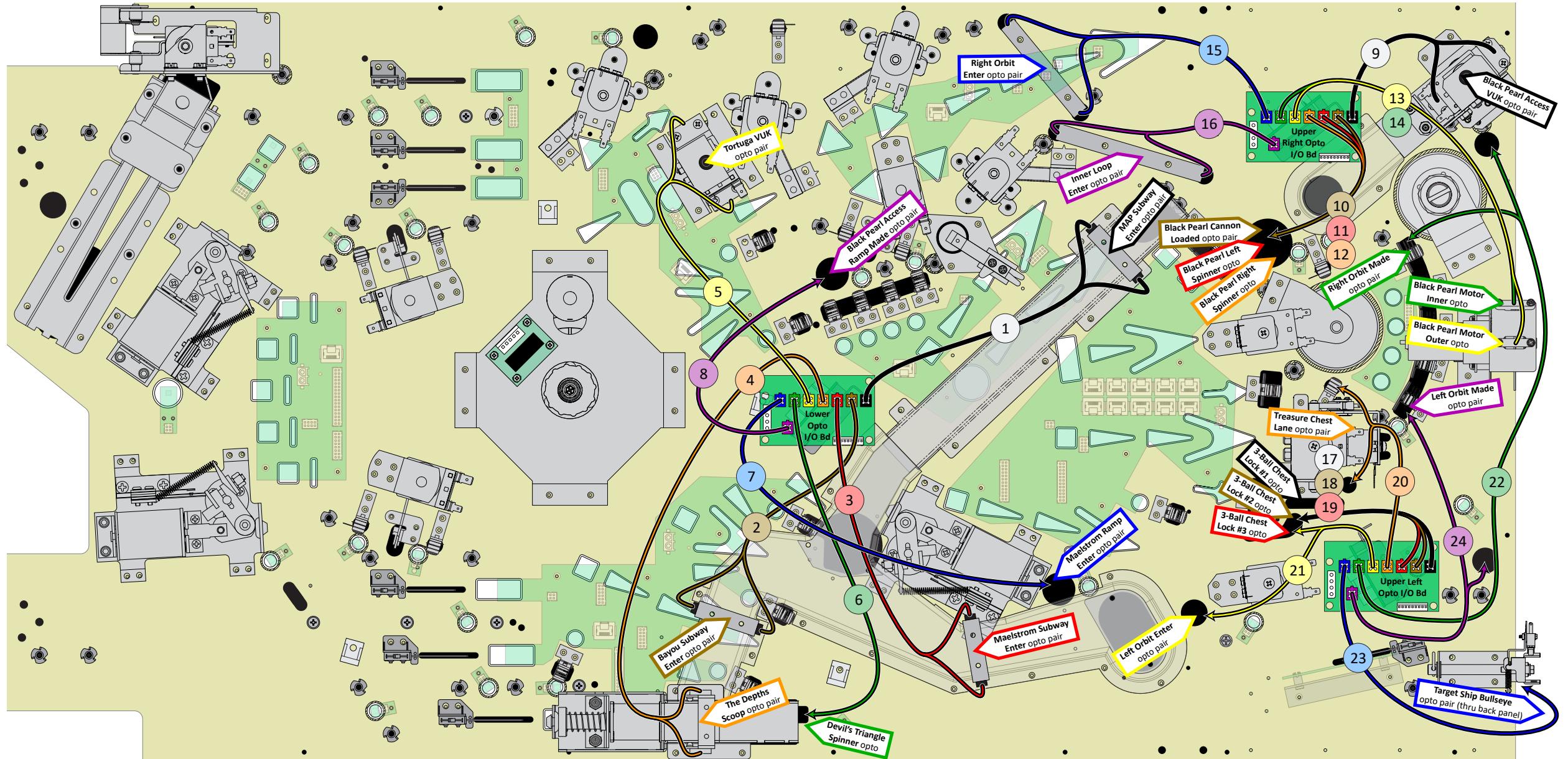
Note: Std games (white GI LEDs) use only the 'B' control/return line for each LED#, whereas CE/LE games (RGB GI LEDs) use all three control/return lines: 'B', 'R' & 'G' for each LED#.



GI Lighting Wiring

Under Playfield

| Cable | Part Number | Description | Main RGB LED Bd Connection | Details |
|-------|------------------|--------------------------------|----------------------------|------------|
| 1 | 19-003125-10 | POTC Lower Right RGB GI Cable | P2/J203 | D-16, D-17 |
| | Std 19-003125-00 | POTC Lower Right GI Cable | P2/J203 | D-16, D-18 |
| 2 | 19-003125-11 | POTC Middle Right RGB GI Cable | P5/J503 | D-27, D-28 |
| | Std 19-003125-01 | POTC Middle Right GI Cable | P5/J503 | D-27, D-28 |
| 3 | 19-003125-12 | POTC Upper Left RGB GI Cable | P9/J910 | D-39, D-41 |
| | Std 19-003125-02 | POTC Upper Left GI Cable | P9/J910 | D-39, D-41 |
| 4 | 19-003125-13 | POTC Lower Left RGB GI Cable | P3/J303 | D-21, D-22 |
| | Std 19-003125-03 | POTC Lower Left GI Cable | P3/J303 | D-21, D-23 |
| 5 | 19-003125-14 | POTC Upper Right RGB GI Cable | P9/J911 | D-39, D-42 |
| | Std 19-003125-04 | POTC Upper Right GI Cable | P9/J911 | D-39, D-42 |

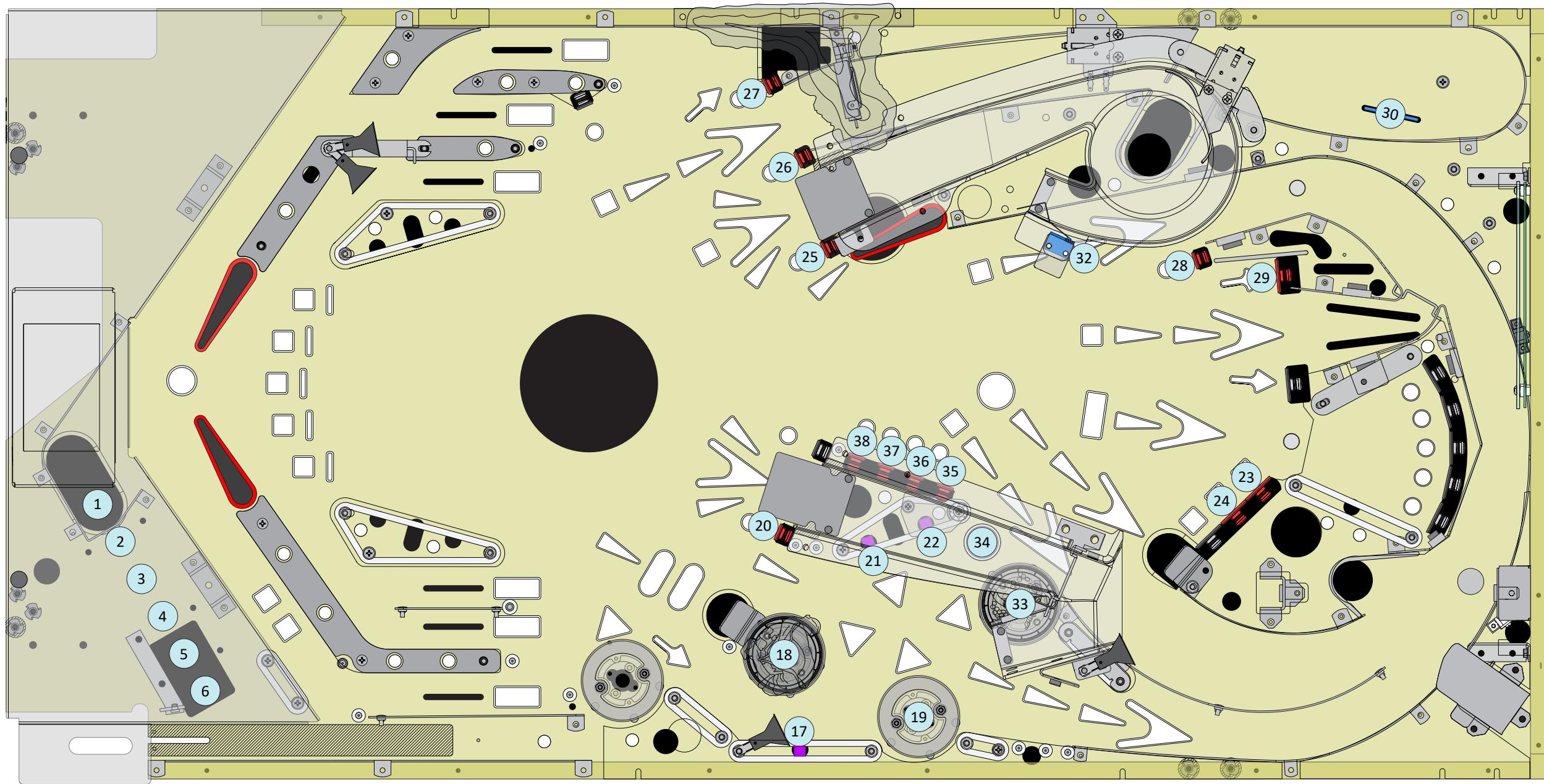


Opto Wiring

Under Playfield

| Cable | Description | Function | Part Number | Opto I/O Board | Connector | Details |
|-------|---|-------------------------------------|--------------|----------------|-----------|-----------|
| 1 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | MAP Subway Enter Switch | 18-007025-24 | Lower | J1/BLK | D-7, D-11 |
| 2 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Bayou Subway Enter Switch | 18-007025-24 | Lower | J2/BRN | D-7, D-11 |
| 3 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Maelstrom Subway Enter Switch | 18-007025-24 | Lower | J3/RED | D-7, D-11 |
| 4 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | The Depths Scoop Switch | 18-007025-24 | Lower | J4/ORN | D-7, D-11 |
| 5 | VUK Opto Switch Cable, BRN | Tortuga VUK Switch | 19-003073-00 | Lower | J5/YEL | D-7, D-11 |
| 6 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Devil's Triangle Spinner Switch | 18-007025-24 | Lower | J6/GRN | D-7, D-11 |
| 7 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Maelstrom Ramp Enter Switch | 18-007025-24 | Lower | J7/BLU | D-7, D-11 |
| 8 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Black Pearl Access Ramp Made Switch | 18-007025-24 | Lower | J8/VIO | D-7, D-11 |
| 9 | VUK Opto Switch Cable, BLK | Black Pearl Access VUK Switch | 19-003073-01 | Upper Right | J1/BLK | D-7, D-9 |
| 10 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Black Pearl Cannon Loaded Switch | 18-007025-24 | Upper Right | J2/BRN | D-7, D-9 |
| 11 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Black Pearl Left Spinner Switch | 18-007025-24 | Upper Right | J3/RED | D-7, D-9 |
| 12 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Black Pearl Right Spinner Switch | 18-007025-24 | Upper Right | J4/ORN | D-7, D-9 |
| 13 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Black Pearl Motor Outer Opto Switch | 18-007025-24 | Upper Right | J5/YEL | D-7, D-9 |
| 14 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Black Pearl Motor Inner Opto Switch | 18-007025-24 | Upper Right | J6/GRN | D-7, D-9 |
| 15 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Right Orbit Enter Switch | 18-007025-24 | Upper Right | J7/BLU | D-7, D-9 |
| 16 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Inner Loop Enter Switch | 18-007025-24 | Upper Right | J8/VIO | D-7, D-9 |
| 17 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | 3-Ball Chest Lock #1 (left) Switch | 18-007025-24 | Upper Left | J1/BLK | D-7, D-10 |
| 18 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | 3-Ball Chest Lock #2 Switch | 18-007025-24 | Upper Left | J2/BRN | D-7, D-10 |
| 19 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | 3-Ball Chest Lock #3 (right) Switch | 18-007025-24 | Upper Left | J3/RED | D-7, D-10 |
| 20 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Treasure Chest Lane Switch | 18-007025-24 | Upper Left | J4/ORN | D-7, D-10 |
| 21 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Left Orbit Enter Switch | 18-007025-24 | Upper Left | J5/YEL | D-7, D-10 |
| 22 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Right Orbit Made Switch | 18-007025-24 | Upper Left | J6/GRN | D-7, D-10 |
| 23 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Target Ship Bullseye Switch | 18-007025-24 | Upper Left | J7/BLU | D-7, D-10 |
| 24 | Opto Pair Assy, OPB100-EZ/SZ, 24" Cable | Left Orbit Made Switch | 18-007025-24 | Upper Left | J8/VIO | D-7, D-10 |

(Matrixed Switch wiring table on pg C-152)

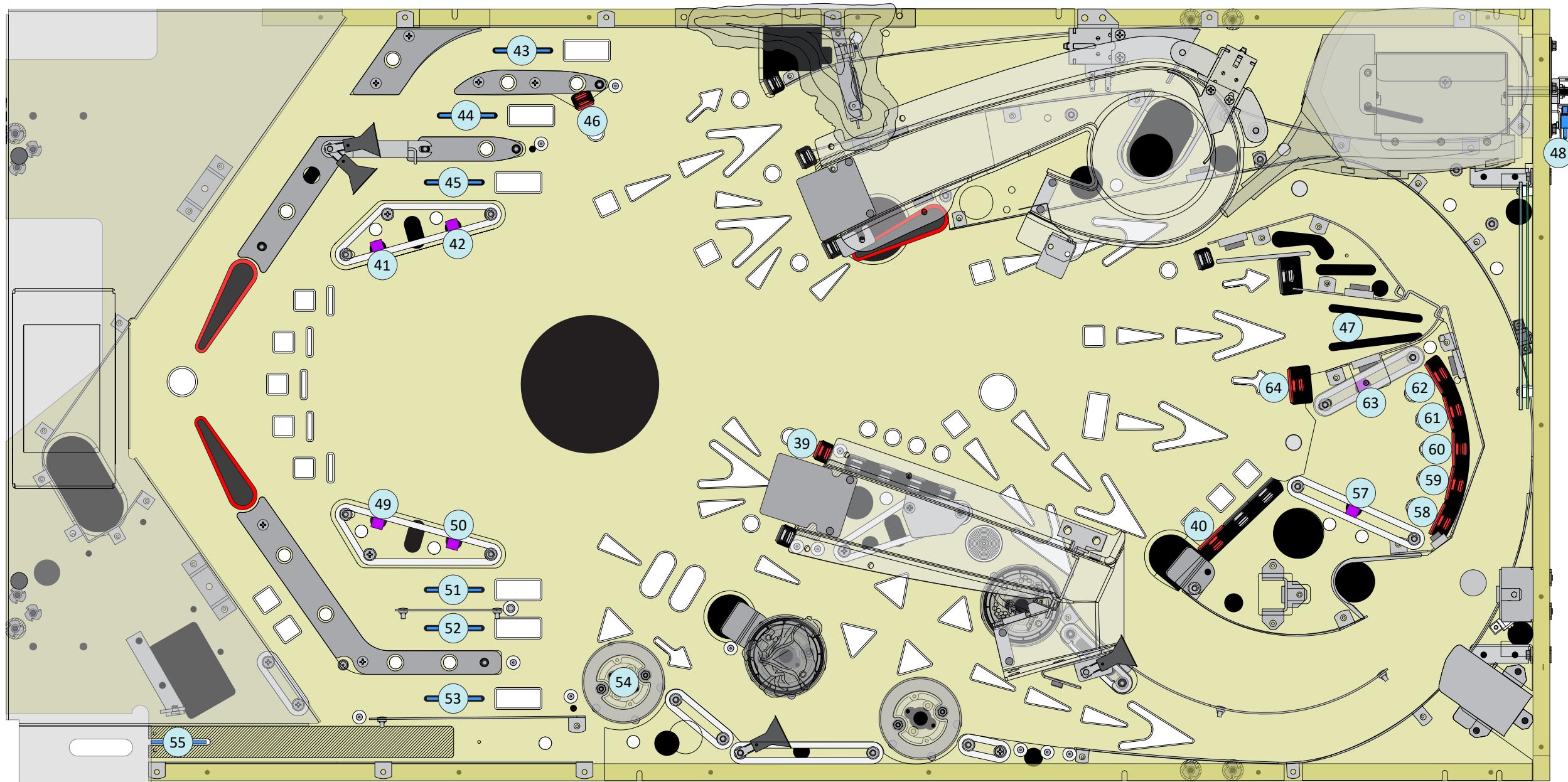


Main Playfield Switch Locations

Above Playfield (1 of 3)

| Switch | Switch Function | Switch Type | Part Number | Part of Assembly | Drawing |
|--------|--------------------------|---|----------------------------|------------------|---------|
| 1 | 5-Ball Trough #5 (left) | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 2 | 5-Ball Trough #4 | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 3 | 5-Ball Trough #3 | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 4 | 5-Ball Trough #2 | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 5 | 5-Ball Trough #1 (right) | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 6 | 5-Ball Trough Jam | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 17 | Pop Bumper Area Rubber | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 18 | Lower Middle Pop Bumper | Pop Bumper Leaf Switch Assy | 18-007007-00 | - | - |
| 19 | Upper Middle Pop Bumper | Pop Bumper Leaf Switch Assy | 18-007007-00 | - | - |
| 20 | 5X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 21 | Upper Slingshot, Low | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 22 | Upper Slingshot, High | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 23 | MAP Target | Round Stand-Up Tgt, RM, Angled, Black | 18-009112-00 | - | - |
| 24 | MAP Target | Round Stand-Up Tgt, RM, Angled, Black | 18-009112-00 | - | - |
| 25 | 2X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 26 | 4X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 27 | 6X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 28 | PIRATE Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 29 | LOAD CHEST Target | Round Stand-Up Tgt, FM, Angled, Black | 18-009102-00 | - | - |
| 30 | Left Turnaround Made | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 32 | Maelstrom Ramp Made | Ramp/Subway Microswitch & Wireform Assy | 18-003017-00 | 52-000075-00 | C-62 |
| 33 | Upper Pop Bumper | Pop Bumper Leaf Switch Assy | 18-007007-00 | - | - |
| 34 | Bumper Rollover | Rollover Button Leaf Switch | 18-000004-00 | 18-007003-00 | C-25 |
| 35 | GOLD Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 36 | GOLD Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 37 | GOLD Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 38 | GOLD Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |

(Matrixed Switch wiring table on pg C-152)



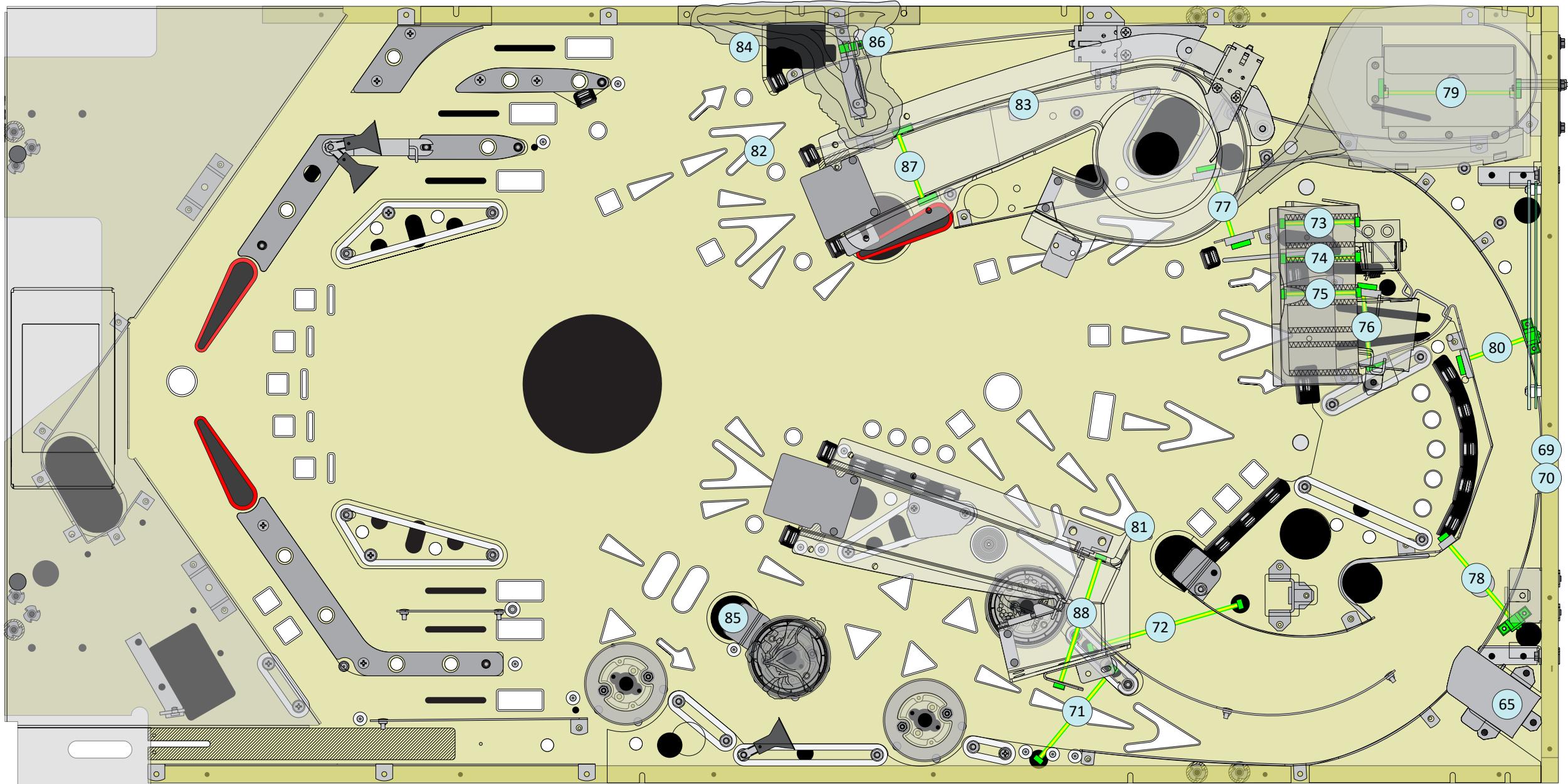
Main Playfield Switch Locations

Above Playfield (2 of 3)

| Switch | Switch Function | Switch Type | Part Number | Part of Assembly | Drawing |
|--------|----------------------------------|---|-----------------|------------------|---------|
| 39 | 3X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 40 | MAP Target | Round Stand-Up Tgt, RM, Angled, Black | 18-009112-00 | - | - |
| 41 | Left Slingshot, Low | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 42 | Left Slingshot, High | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 43 | PIRATE Return Lane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 44 | PIRATE Outlane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 45 | PIRATE Return Lane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 46 | Spot Character Target | Oblong Stand-Up Tgt, FM, Angled, Black* | 18-009100-00-FR | - | - |
| 47 | 3-Ball Lock Forks Up | Ramp Entrance Microswitch & Blade | 18-003011-00 | 51-0000088-00 | C-30 |
| 48 | Target Ship Hit | Microswitch w/Roller Actuator | 18-003005-00 | 52-0000073-00 | C-58 |
| 49 | Right Slingshot, Low | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 50 | Right Slingshot, High | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 51 | PIRATE Return Lane | Rollover Microswitch & Wireform, Rnd, LM | 18-003004-01 | - | - |
| 52 | PIRATE Return Lane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 53 | PIRATE Outlane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 54 | Lower Pop Bumper | Pop Bumper Leaf Switch Assy | 18-007007-00 | - | - |
| 55 | Shooter Lane | Auto-Launch Microswitch & Wireform | 18-003001-00 | 51-0000026-00 | C-22 |
| 57 | Chapter Select Right Rubber | Upright Leaf Switch Assy, RM | 18-007008-01 | - | - |
| 58 | Chapter Select Target #5 (right) | Round Stand-Up Tgt, FM, Angled, LR, Black | 18-009102-00R | - | - |
| 59 | Chapter Select Target #4 | Round Stand-Up Tgt, RM, Angled, LR, Black | 18-009112-00R | - | - |
| 60 | Chapter Select Target #3 | Round Stand-Up Tgt, RM, Angled, LR, Black | 18-009112-00R | - | - |
| 61 | Chapter Select Target #2 | Round Stand-Up Tgt, RM, Angled, LR, Black | 18-009112-00R | - | - |
| 62 | Chapter Select Target #1 (left) | Round Stand-Up Tgt, RM, Angled, LR, Black | 18-009112-00R | - | - |
| 63 | Chapter Select Left Rubber | Upright Leaf Switch Assy, RM | 18-007008-01 | - | - |
| 64 | LOAD CHEST Target | Round Stand-Up Tgt, FM, Angled, Black | 18-009102-00 | - | - |

*Foam removed from stand-up target

(Matrixed Switch wiring table on pg C-152)

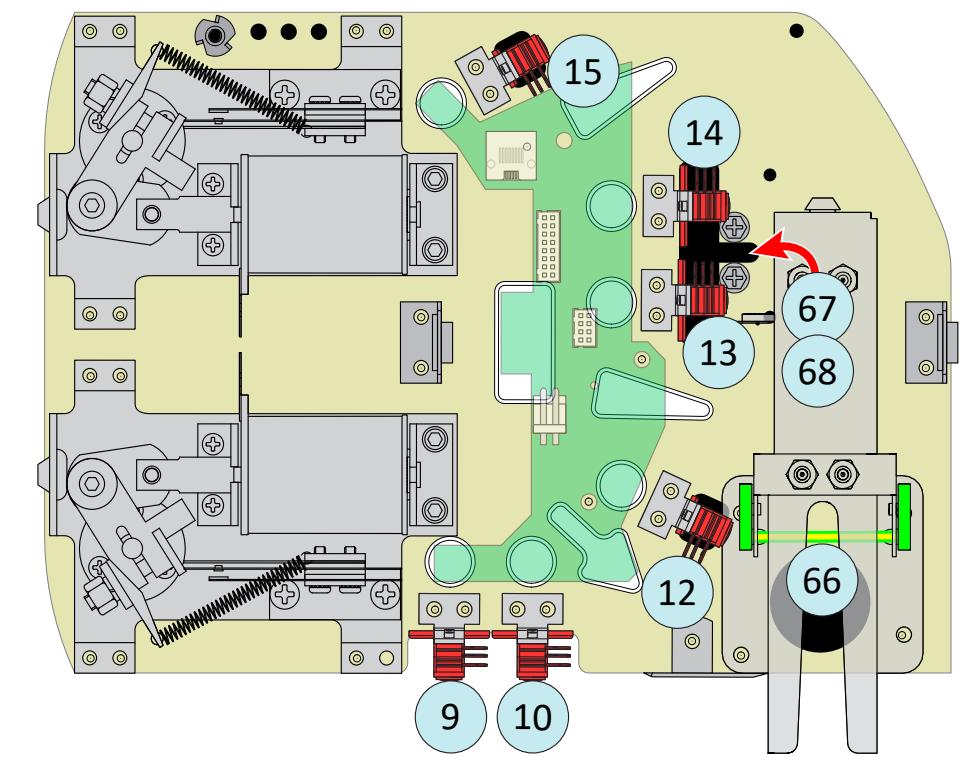
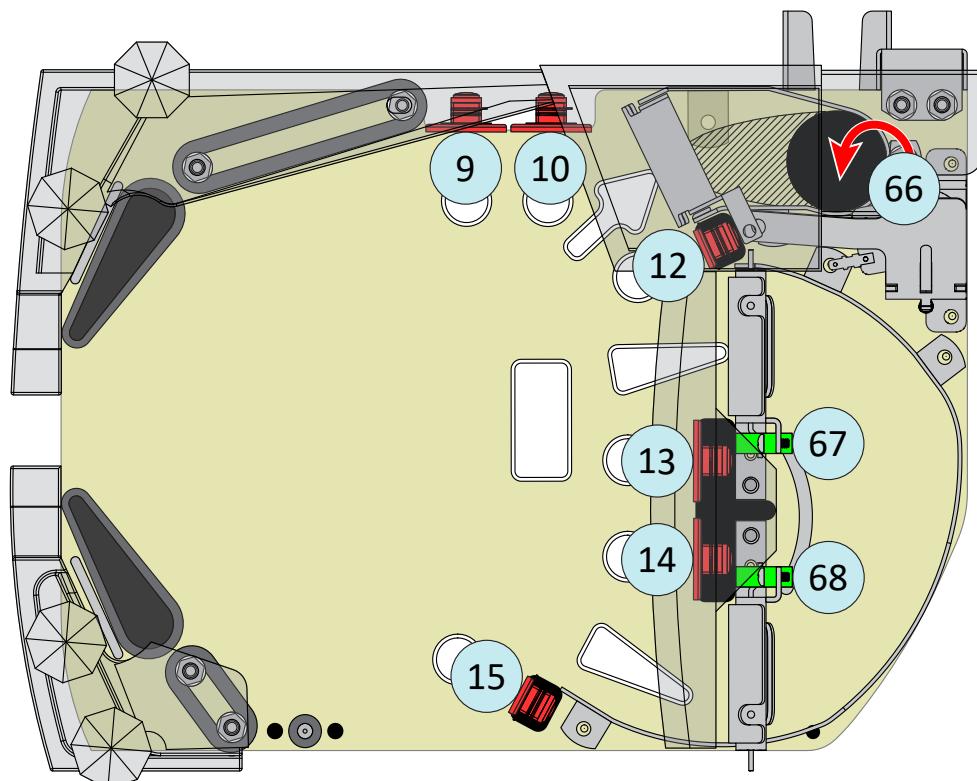


Main Playfield Switch Locations

Above Playfield (3 of 3)

| Switch | Switch Function | Switch Type | Part Number | Part of Assembly | Drawing |
|---------------|------------------------------|--------------------------------|----------------------------|-------------------------|----------------|
| 65 | Black Pearl Access VUK | Opto LED, Phototransistor Pair | 15-005004-01, 15-005004-00 | 51-000012-00 | C-18 |
| 69 | Black Pearl Motor Outer Opto | U-Shaped Opto | 18-005000-00 | 52-000068-00 | C-54 |
| 70 | Black Pearl Motor Inner Opto | U-Shaped Opto | 18-005000-00 | 52-000068-00 | C-54 |
| 71 | Right Orbit Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | - | - |
| 72 | Inner Loop Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | - | - |
| 73 | 3-Ball Chest Lock #1 (left) | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000074-00 | C-60 |
| 74 | 3-Ball Chest Lock #2 | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000074-00 | C-60 |
| 75 | 3-Ball Chest Lock #3 (right) | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000074-00 | C-60 |
| 76 | Treasure Chest Lane | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | - | - |
| 77 | Left Orbit Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | - | - |
| 78 | Right Orbit Made | Opto LED, Phototransistor Pair | 15-005004-01, 18-005001-01 | - | - |
| 79 | Target Ship Bullseye | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000073-01 | C-59 |
| 80 | Left Orbit Made | Opto LED, Phototransistor Pair | 18-005001-00, 15-005004-00 | - | - |
| 81 | MAP Subway Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000078-10 | C-67 |
| 82 | Bayou Subway Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000078-00 | C-66 |
| 83 | Maelstrom Subway Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000078-00 | C-66 |
| 84 | The Depths Scoop | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 51-000083-01 | C-29 |
| 85 | Tortuga VUK | Opto LED, Phototransistor Pair | 15-005004-01, 15-005004-00 | 51-000009-00 | C-15 |
| 86 | Devil's Triangle Spinner | U-Shaped Opto | 18-005003-00 | 51-000089-00 | C-34 |
| 87 | Maelstrom Ramp Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000075-00 | C-62 |
| 88 | Black Pearl Access Ramp Made | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000076-00 | C-64 |

(Matrixed Switch wiring table on pg C-152)

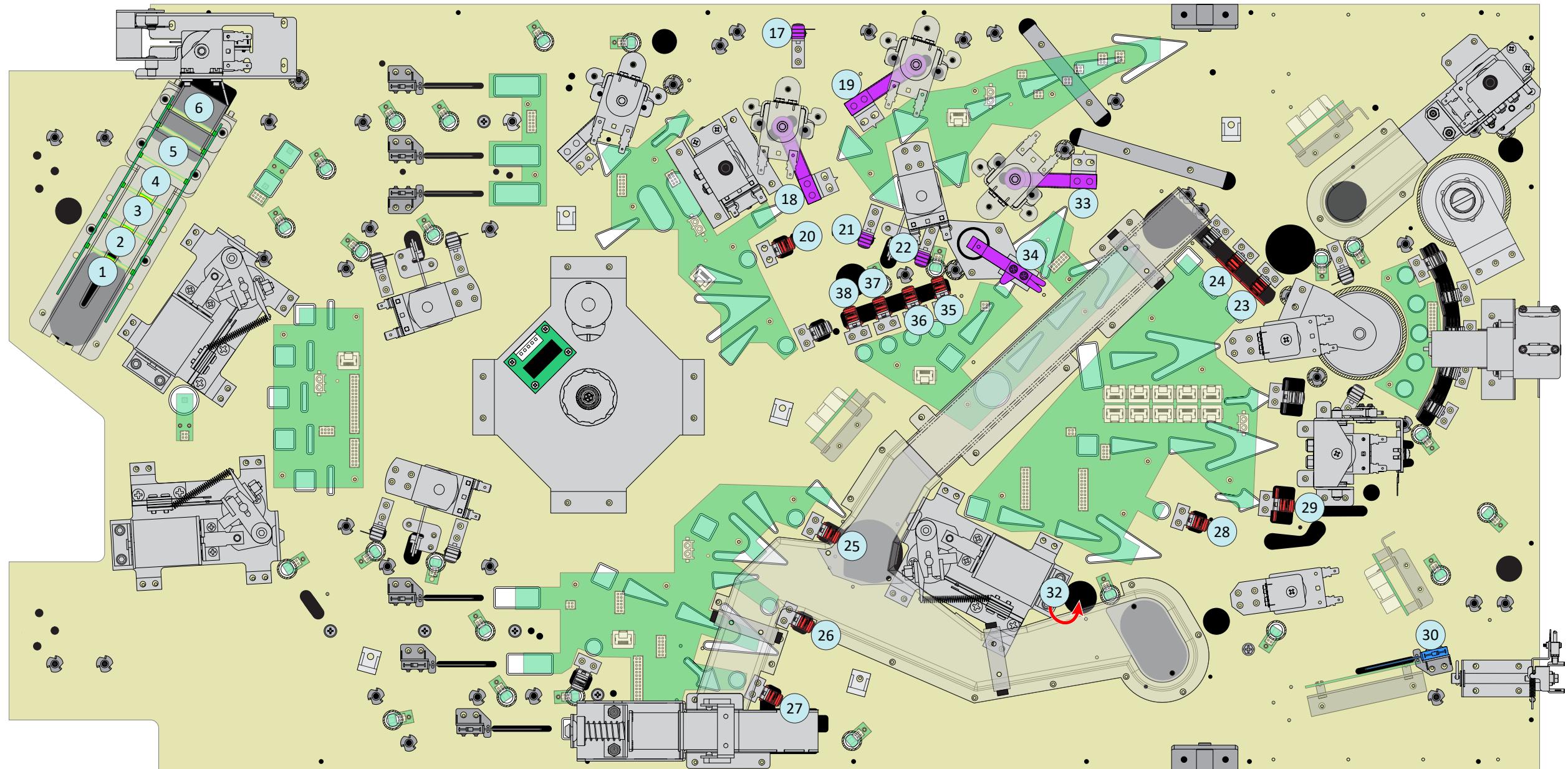


Black Pearl Mini Playfield Switch Locations

| Switch | Switch Function | Switch Type | Part Number | Part of Assembly | Drawing |
|--------|---------------------------------------|--|----------------------------|------------------|---------|
| 9 | Black Pearl BONUS X Target | Round Stand-Up Tgt, FM, Angled, LR, Black* | 18-009102-00R-FR | - | - |
| 10 | Black Pearl BONUS X Target | Round Stand-Up Tgt, FM, Angled, LR, Black* | 18-009102-00R-FR | - | - |
| 12 | Black Pearl LOAD CANNON Target | Oblong Stand-Up Tgt, FM, Angled, LL, Black | 18-009100-00L | - | - |
| 13 | Black Pearl SPOT GOLD Target | Round Stand-Up Tgt, FM, Angled, LR, Black | 18-009102-00R | - | - |
| 14 | Black Pearl SPOT GOLD Target | Round Stand-Up Tgt, FM, Angled, LR, Black | 18-009102-00R | - | - |
| 15 | Black Pearl LOAD CANNON Target | Oblong Stand-Up Tgt, FM, Angled, LL, Black | 18-009100-00L | - | - |
| 66 | Black Pearl Cannon Loaded | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000069-00 | C-51 |
| 67 | Black Pearl Left Spinner | U-Shaped Opto | 18-005003-00 | 51-000089-01 | C-34 |
| 68 | Black Pearl Right Spinner | U-Shaped Opto | 18-005003-00 | 51-000089-00 | C-34 |

*Foam removed from stand-up target

(Matrixed Switch wiring table on pg C-152)

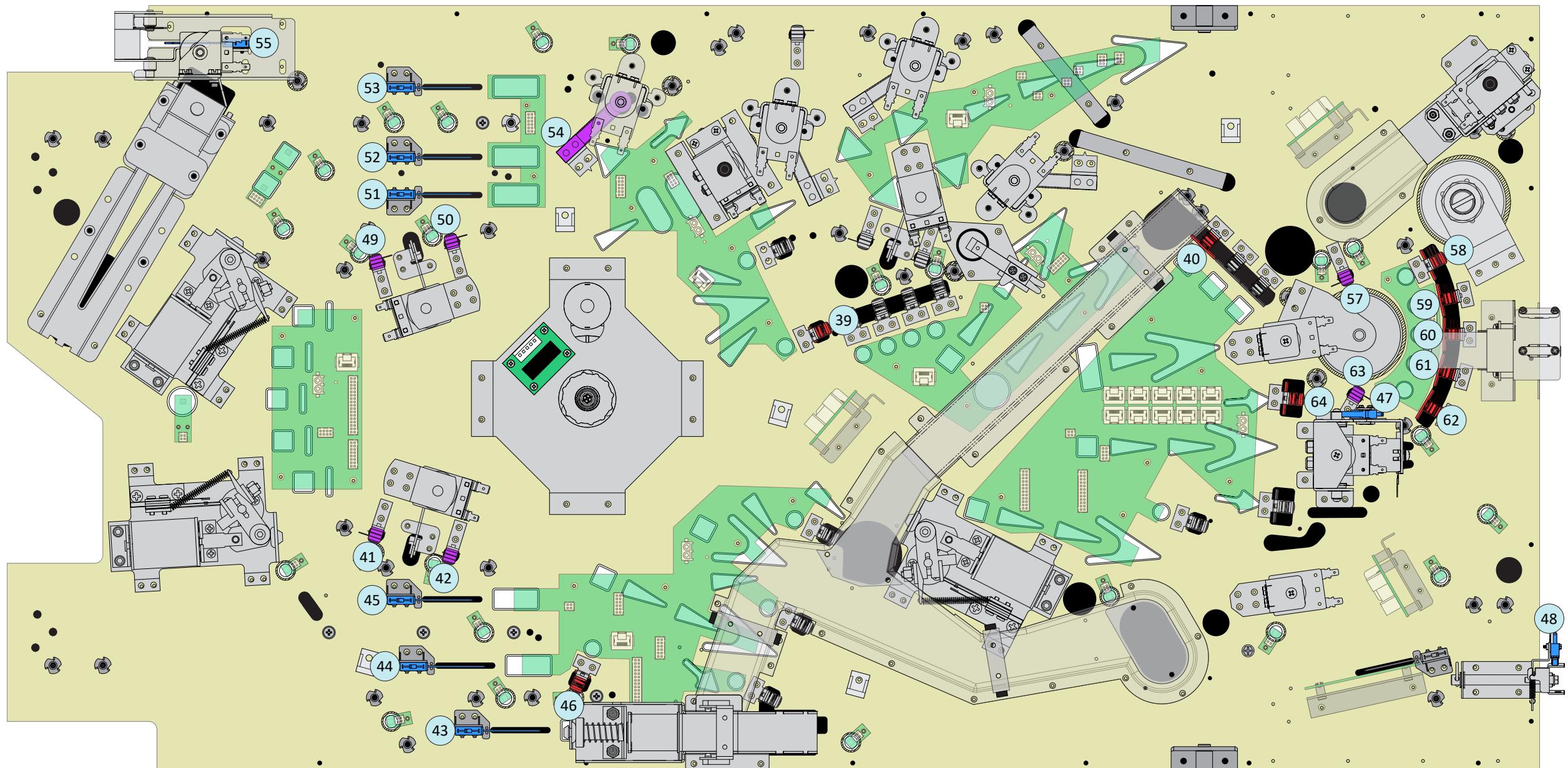


Main Playfield Switch Locations

Under Playfield (1 of 3)

| Switch | Switch Function | Switch Type | Part Number | Part of Assembly | Drawing |
|--------|--------------------------|---|----------------------------|------------------|---------|
| 1 | 5-Ball Trough #5 (left) | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 2 | 5-Ball Trough #4 | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 3 | 5-Ball Trough #3 | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 4 | 5-Ball Trough #2 | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 5 | 5-Ball Trough #1 (right) | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 6 | 5-Ball Trough Jam | Opto LED, Phototransistor Pair | 15-005007-01, 15-005007-00 | 51-000021-00 | C-20 |
| 17 | Pop Bumper Area Rubber | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 18 | Lower Middle Pop Bumper | Pop Bumper Leaf Switch Assy | 18-007007-00 | - | - |
| 19 | Upper Middle Pop Bumper | Pop Bumper Leaf Switch Assy | 18-007007-00 | - | - |
| 20 | 5X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 21 | Upper Slingshot, Low | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 22 | Upper Slingshot, High | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 23 | MAP Target | Round Stand-Up Tgt, RM, Angled, Black | 18-009112-00 | - | - |
| 24 | MAP Target | Round Stand-Up Tgt, RM, Angled, Black | 18-009112-00 | - | - |
| 25 | 2X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 26 | 4X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 27 | 6X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 28 | PIRATE Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 29 | LOAD CHEST Target | Round Stand-Up Tgt, FM, Angled, Black | 18-009102-00 | - | - |
| 30 | Left Turnaround Made | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 32 | Maelstrom Ramp Made | Ramp/Subway Microswitch & Wireform Assy | 18-003017-00 | 52-000075-00 | C-62 |
| 33 | Upper Pop Bumper | Pop Bumper Leaf Switch Assy | 18-007007-00 | - | - |
| 34 | Bumper Rollover | Rollover Button Leaf Switch | 18-000004-00 | 18-007003-00 | C-25 |
| 35 | GOLD Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 36 | GOLD Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 37 | GOLD Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 38 | GOLD Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |

(Matrixed Switch wiring table on pg C-152)



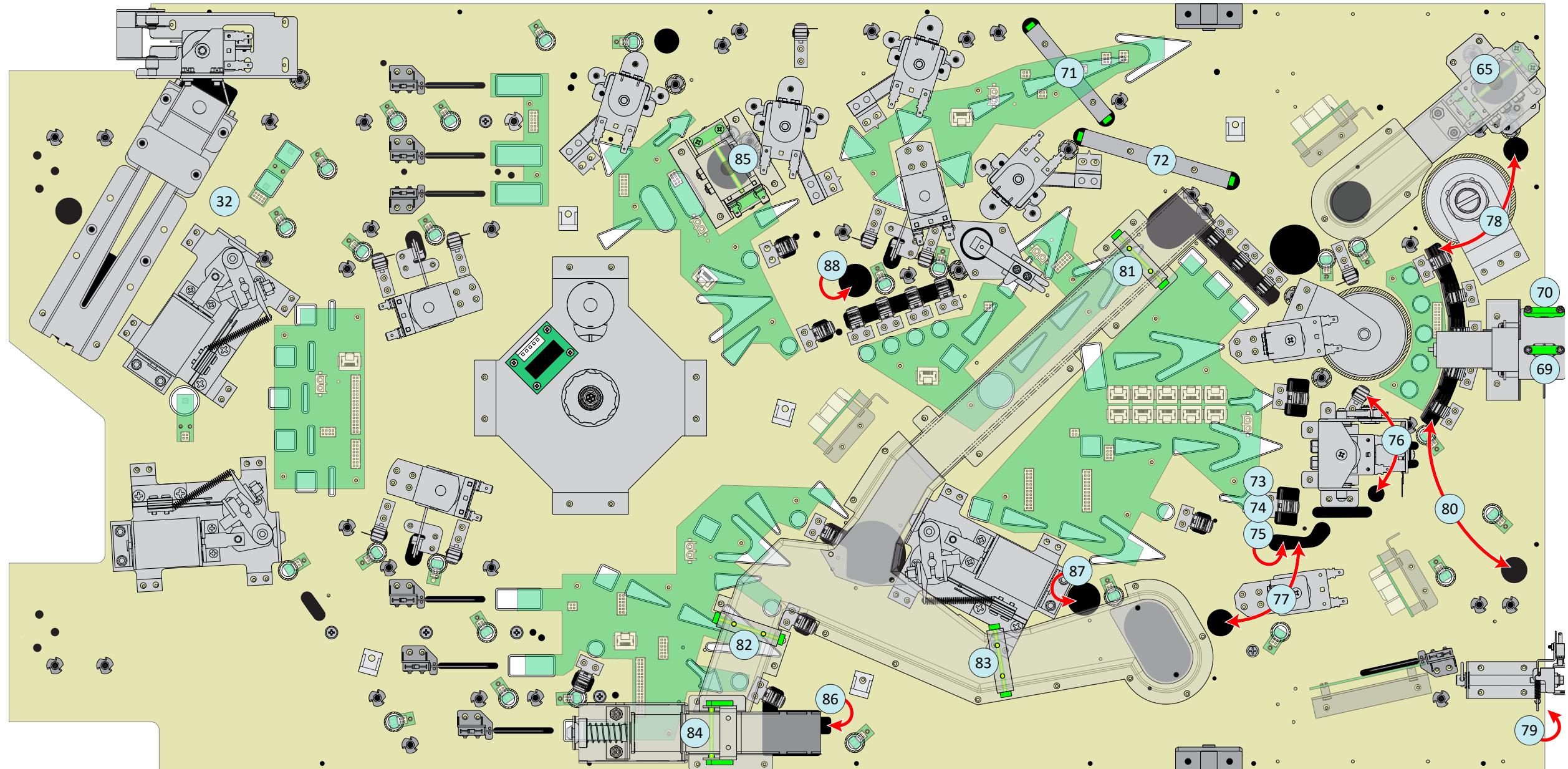
Main Playfield Switch Locations

Under Playfield (2 of 3)

| Switch | Switch Function | Switch Type | Part Number | Part of Assembly | Drawing |
|--------|----------------------------------|---|-----------------|------------------|---------|
| 39 | 3X Target | Oblong Stand-Up Tgt, FM, Angled, Black | 18-009100-00 | - | - |
| 40 | MAP Target | Round Stand-Up Tgt, RM, Angled, Black | 18-009112-00 | - | - |
| 41 | Left Slingshot, Low | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 42 | Left Slingshot, High | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 43 | PIRATE Return Lane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 44 | PIRATE Outlane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 45 | PIRATE Return Lane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 46 | Spot Character Target | Oblong Stand-Up Tgt, FM, Angled, Black* | 18-009100-00-FR | - | - |
| 47 | 3-Ball Lock Forks Up | Ramp Entrance Microswitch & Blade | 18-003011-00 | 51-000088-00 | C-30 |
| 48 | Target Ship Hit | Microswitch w/Roller Actuator | 18-003005-00 | 52-000073-00 | C-58 |
| 49 | Right Slingshot, Low | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 50 | Right Slingshot, High | Upright Leaf Switch Assy, FM | 18-007008-00 | - | - |
| 51 | PIRATE Return Lane | Rollover Microswitch & Wireform, Rnd, LM | 18-003004-01 | - | - |
| 52 | PIRATE Return Lane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 53 | PIRATE Outlane | Rollover Microswitch & Wireform, Rnd, RtM | 18-003004-00 | - | - |
| 54 | Lower Pop Bumper | Pop Bumper Leaf Switch Assy | 18-007007-00 | - | - |
| 55 | Shooter Lane | Auto-Launch Microswitch & Wireform | 18-003001-00 | 51-000026-00 | C-22 |
| 57 | Chapter Select Right Rubber | Upright Leaf Switch Assy, RM | 18-007008-01 | - | - |
| 58 | Chapter Select Target #5 (right) | Round Stand-Up Tgt, FM, Angled, LR, Black | 18-009102-00R | - | - |
| 59 | Chapter Select Target #4 | Round Stand-Up Tgt, RM, Angled, LR, Black | 18-009112-00R | - | - |
| 60 | Chapter Select Target #3 | Round Stand-Up Tgt, RM, Angled, LR, Black | 18-009112-00R | - | - |
| 61 | Chapter Select Target #2 | Round Stand-Up Tgt, RM, Angled, LR, Black | 18-009112-00R | - | - |
| 62 | Chapter Select Target #1 (left) | Round Stand-Up Tgt, RM, Angled, LR, Black | 18-009112-00R | - | - |
| 63 | Chapter Select Left Rubber | Upright Leaf Switch Assy, RM | 18-007008-01 | - | - |
| 64 | LOAD CHEST Target | Round Stand-Up Tgt, FM, Angled, Black | 18-009102-00 | - | - |

*Foam removed from stand-up target

(Matrixed Switch wiring table on pg C-152)

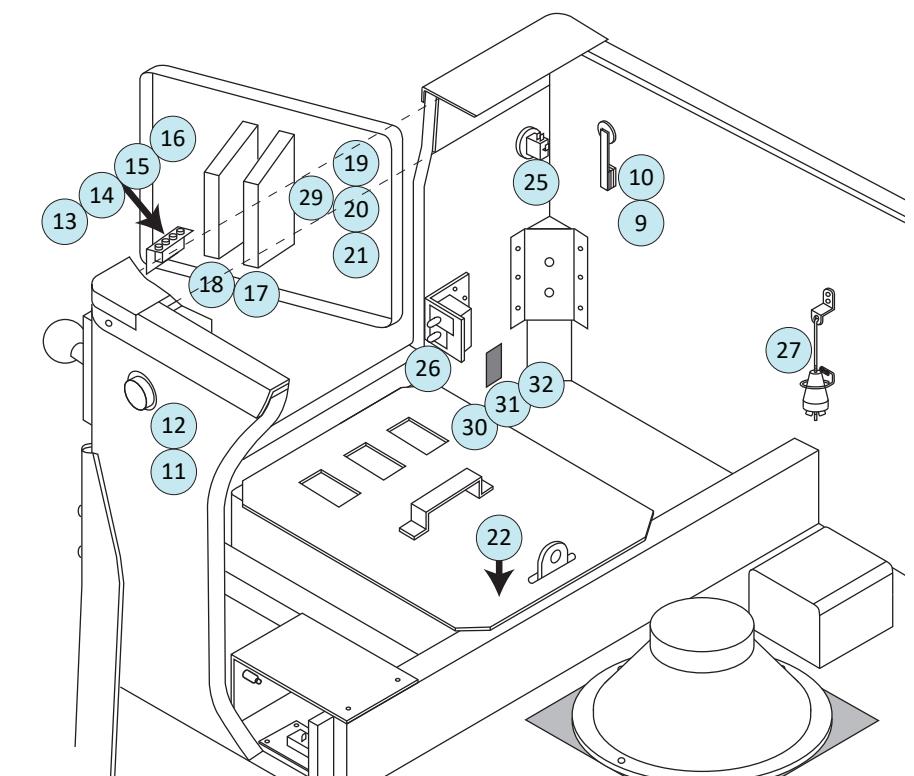
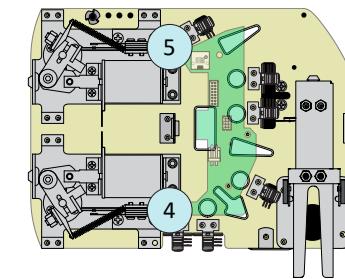
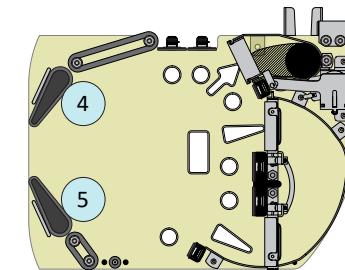
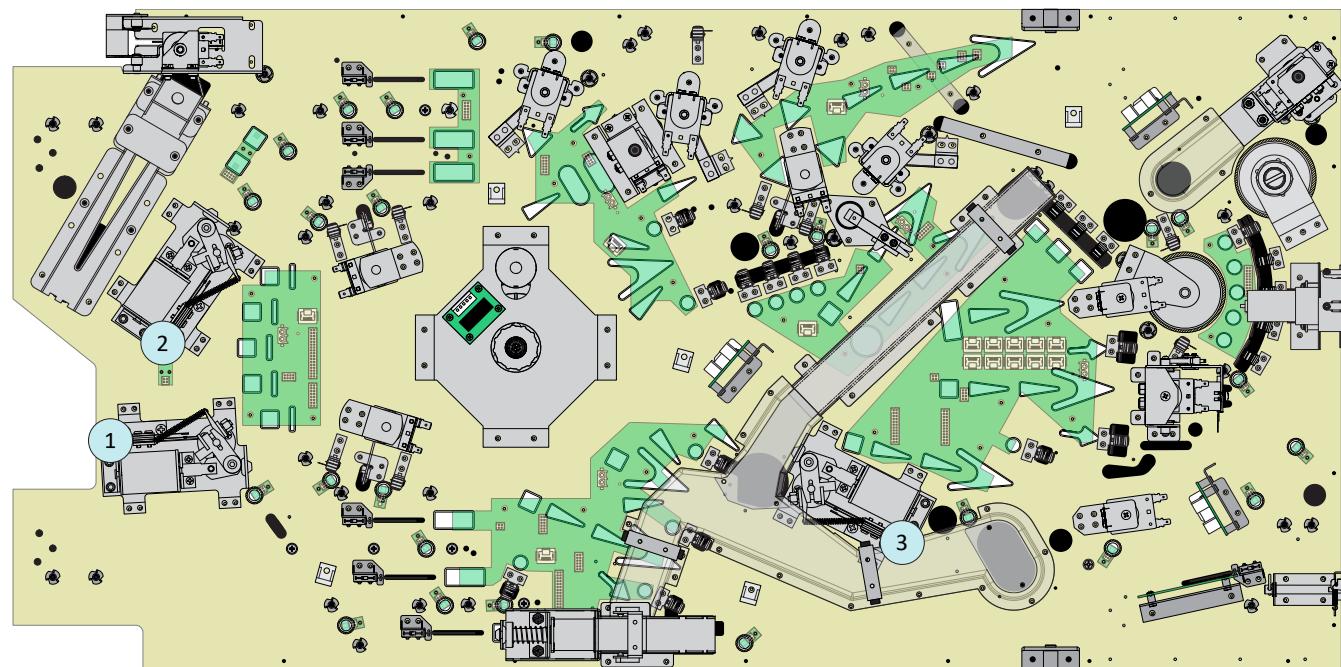
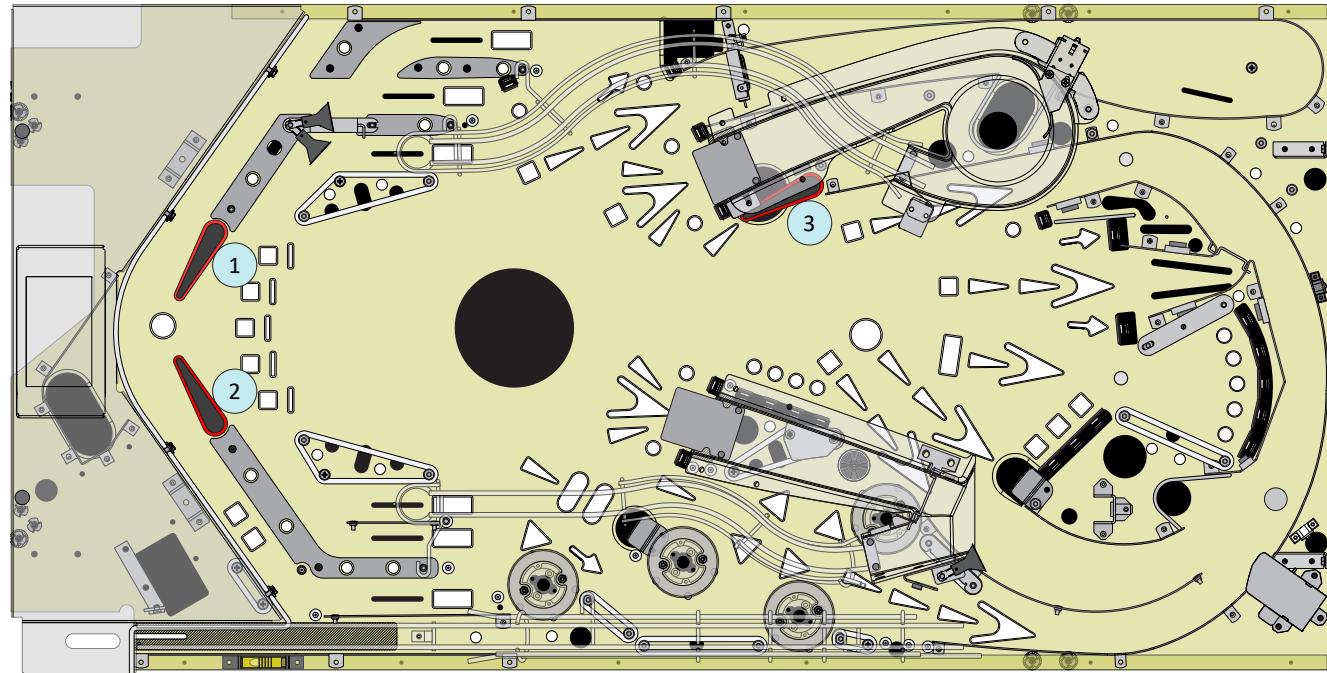


Main Playfield Switch Locations

Under Playfield (3 of 3)

| Switch | Switch Function | Switch Type | Part Number | Part of Assembly | Drawing |
|--------|------------------------------|--------------------------------|----------------------------|------------------|---------|
| 65 | Black Pearl Access VUK | Opto LED, Phototransistor Pair | 15-005004-01, 15-005004-00 | 51-000012-00 | C-18 |
| 69 | Black Pearl Motor Outer Opto | U-Shaped Opto | 18-005000-00 | 52-000068-00 | C-54 |
| 70 | Black Pearl Motor Inner Opto | U-Shaped Opto | 18-005000-00 | 52-000068-00 | C-54 |
| 71 | Right Orbit Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | - | - |
| 72 | Inner Loop Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | - | - |
| 73 | 3-Ball Chest Lock #1 (left) | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000074-00 | C-60 |
| 74 | 3-Ball Chest Lock #2 | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000074-00 | C-60 |
| 75 | 3-Ball Chest Lock #3 (right) | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000074-00 | C-60 |
| 76 | Treasure Chest Lane | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | - | - |
| 77 | Left Orbit Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | - | - |
| 78 | Right Orbit Made | Opto LED, Phototransistor Pair | 15-005004-01, 18-005001-01 | - | - |
| 79 | Target Ship Bullseye | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000073-01 | C-59 |
| 80 | Left Orbit Made | Opto LED, Phototransistor Pair | 18-005001-00, 15-005004-00 | - | - |
| 81 | MAP Subway Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000078-10 | C-67 |
| 82 | Bayou Subway Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000078-00 | C-66 |
| 83 | Maelstrom Subway Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000078-00 | C-66 |
| 84 | The Depths Scoop | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 51-000083-01 | C-29 |
| 85 | Tortuga VUK | Opto LED, Phototransistor Pair | 15-005004-01, 15-005004-00 | 51-000009-00 | C-15 |
| 86 | Devil's Triangle Spinner | U-Shaped Opto | 18-005003-00 | 51-000089-00 | C-34 |
| 87 | Maelstrom Ramp Enter | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000075-00 | C-62 |
| 88 | Black Pearl Access Ramp Made | Opto LED, Phototransistor Pair | 18-005001-00, 18-005001-01 | 52-000076-00 | C-64 |

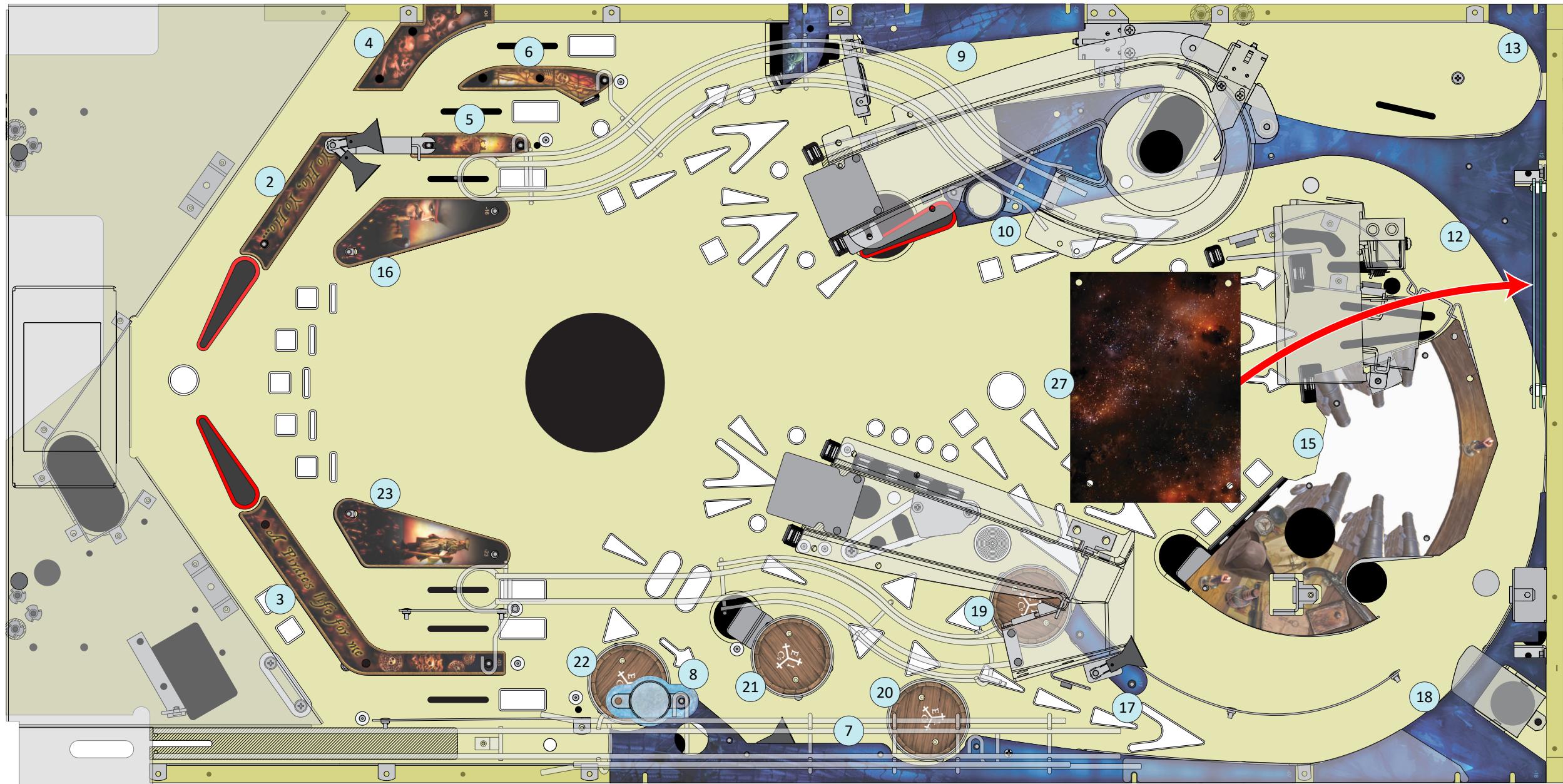
(Matrixed Switch wiring table on pg C-152)



Dedicated Switch Locations

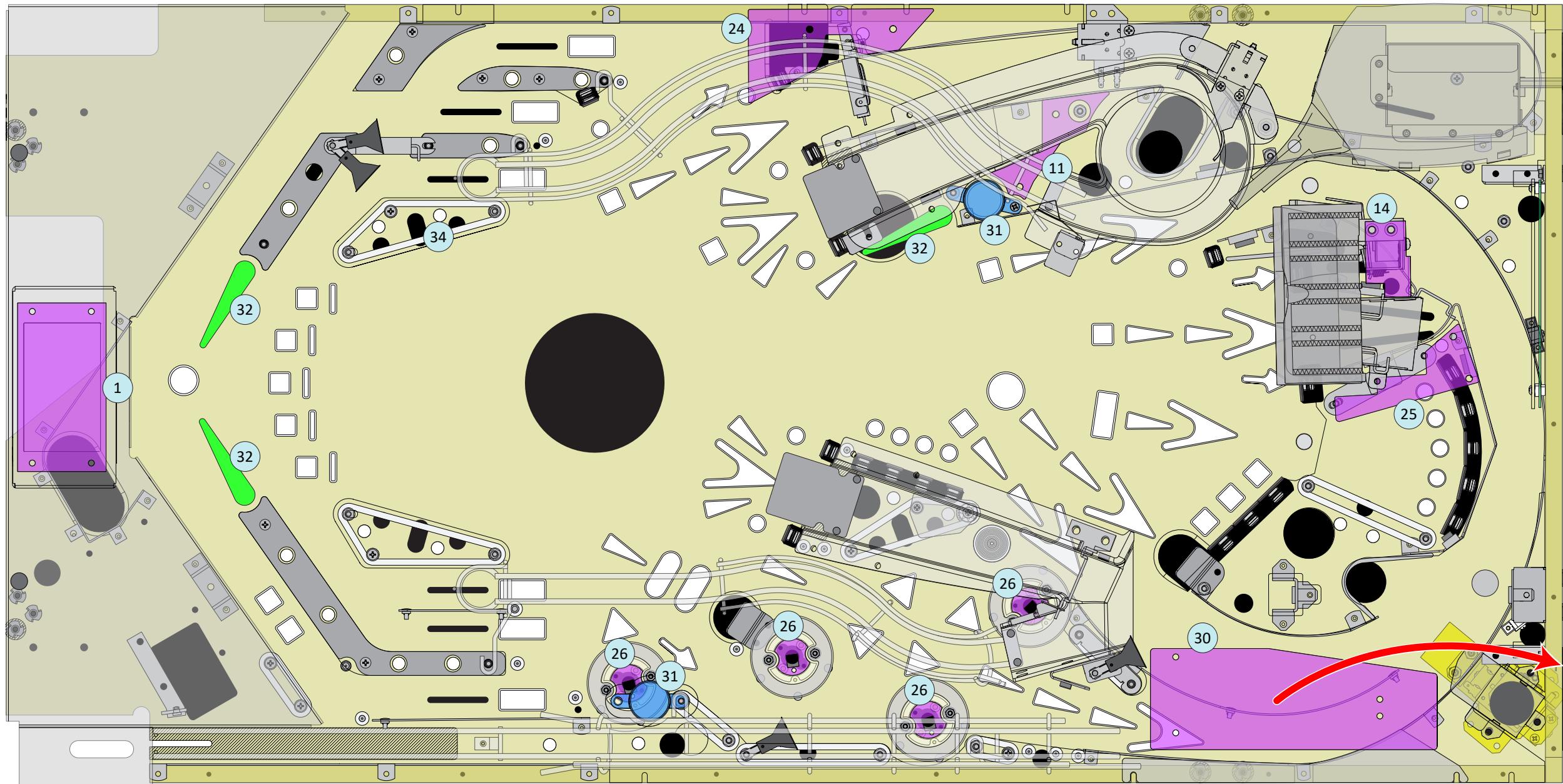
| Switch | Switch Function | Switch Type | Part Number | Part of Assembly | Drawing |
|---------------|---|--|--------------------|-------------------------|----------------|
| 1 | Left Flipper EOS Switch | End Of Stroke Leaf Switch | 18-000001-00 | 51-000002-00 | C-12 |
| 2 | Right Flipper EOS Switch | End Of Stroke Leaf Switch | 18-000001-00 | 51-000001-00 | C-10 |
| 3 | Upper Left Flipper EOS Switch | End Of Stroke Leaf Switch | 18-000001-00 | 51-000002-00 | C-12 |
| 4 | Black Pearl Left Flipper EOS Switch | End Of Stroke Leaf Switch | 18-000001-00 | 51-000002-32 | C-12 |
| 5 | Black Pearl Right Flipper EOS Switch | End Of Stroke Leaf Switch | 18-000001-00 | 51-000001-33 | C-10 |
| 9 | Left Flipper Switch, Lower | Flipper Leaf Switch, Double Contact | 18-000005-01 | - | - |
| 10 | Left Flipper Switch, Upper | Flipper Leaf Switch, Double Contact | 18-000005-01 | - | - |
| 11 | Right Flipper Switch, Lower | Flipper Leaf Switch, Double Contact | 18-000005-01 | - | - |
| 12 | Right Flipper Switch, Upper | Flipper Leaf Switch, Double Contact | 18-000005-01 | - | - |
| 13 | Enter/Menu Button | Pushbutton, Momentary Contact | - | - | - |
| 14 | Up/Volume+ Button | Pushbutton, Momentary Contact | - | - | - |
| 15 | Down/Volume- Button | Pushbutton, Momentary Contact | - | - | - |
| 16 | Escape/Service Credit Button | Pushbutton, Momentary Contact | - | - | - |
| 17 | Left Coin Switch | Microswitch & Wireform | - | - | - |
| 18 | Right Coin Switch | Microswitch & Wireform | - | - | - |
| 19 | Center Dollar Bill Acceptor | Electronic | - | - | - |
| 20 | 4th Coin Slot Switch | Electronic | - | - | - |
| 21 | 5th Coin Slot Switch | Electronic | - | - | - |
| 22 | Ticket Motor Notch Switch (under cabinet) | U-Shaped Opto | - | - | - |
| 25 | Start Button | Start Button Switch Assy, Recessed, Yellow | 18-007023-04 | - | - |
| 26 | Coin Door Open | Miniswitch | 18-003008-00 | 51-000035-00 | - |
| 27 | Plumb Bob Tilt | Contact | - | 51-000028-00 | C-25 |
| 29 | Action Button (inside cabinet front) | Mini Switch w/Blade Actuator | 18-003015-00 | 51-000066-10 | C-47 |
| 30 | Headphone Panel Volume Down | Volume Control Switch, Rocker Style, SPDT | 18-003006-01 | 51-000064-00 | C-28 |
| 31 | Headphone Panel Volume Up | Volume Control Switch, Rocker Style, SPDT | 18-003006-01 | 51-000064-00 | C-28 |
| 32 | Headphone Panel Jack Sense | Contact | 30-002506-20 | 15-000052-00 | D-59 |

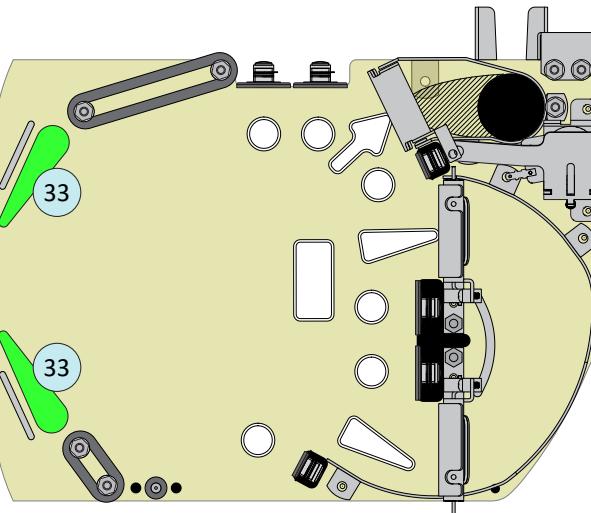
(Dedicated Switch wiring table on pg C-153)



Printed Playfield Plastics

| Item | Part Number | Description |
|--------|--------------|--|
| 2 | 30-003013-02 | POTC Yo Ho, Yo Ho... Left Inlane Plastic |
| 3 | 30-003013-03 | POTC A Pirate's life for me Right Inlane Plastic |
| 4 | 30-003013-04 | POTC Skull Pile Left Inlane Plastic |
| 5 | 30-003013-05 | POTC Sword Fight Lane Divider Plastic |
| 6 | 30-003013-06 | POTC Skeleton Lane Divider Plastic |
| 7 | 30-003013-07 | POTC Rigging Right Side Plastic |
| 8 | 30-003013-08 | POTC Right Flasher Dome Mtg Plastic |
| 9 | 30-003013-09 | POTC Rigging Left Side Plastic |
| 10 | 30-003013-10 | POTC Sails Left Flasher Dome Plastic |
| 12 | 30-003013-12 | POTC Sails Upper Left Plastic |
| 13 | 30-003013-13 | POTC Sails Upper Left Corner Plastic |
| 15 | 30-003013-15 | POTC Chapter Start Cannons Plastic |
| 16 | 30-003013-16 | POTC Jack Face Left Sling Plastic |
| 17 | 30-003013-17 | POTC Blue Upper Bumper Area Plastic |
| 18 | 30-003013-18 | POTC Sails Upper Right Corner Plastic |
| 19 Std | 30-003013-19 | POTC Std Upper Pop Bumper Plastic |
| 20 | 30-003013-20 | POTC Upper Middle Pop Bumper Plastic |
| 21 Std | 30-003013-21 | POTC Std Lower Middle Pop Bumper Plastic |
| 22 | 30-003013-22 | POTC Lower Pop Bumper Plastic |
| 23 | 30-003013-23 | POTC Jack Standing Right Sling Plastic |
| 27 | 30-003013-27 | POTC Back Panel Starfield Cover Plastic |

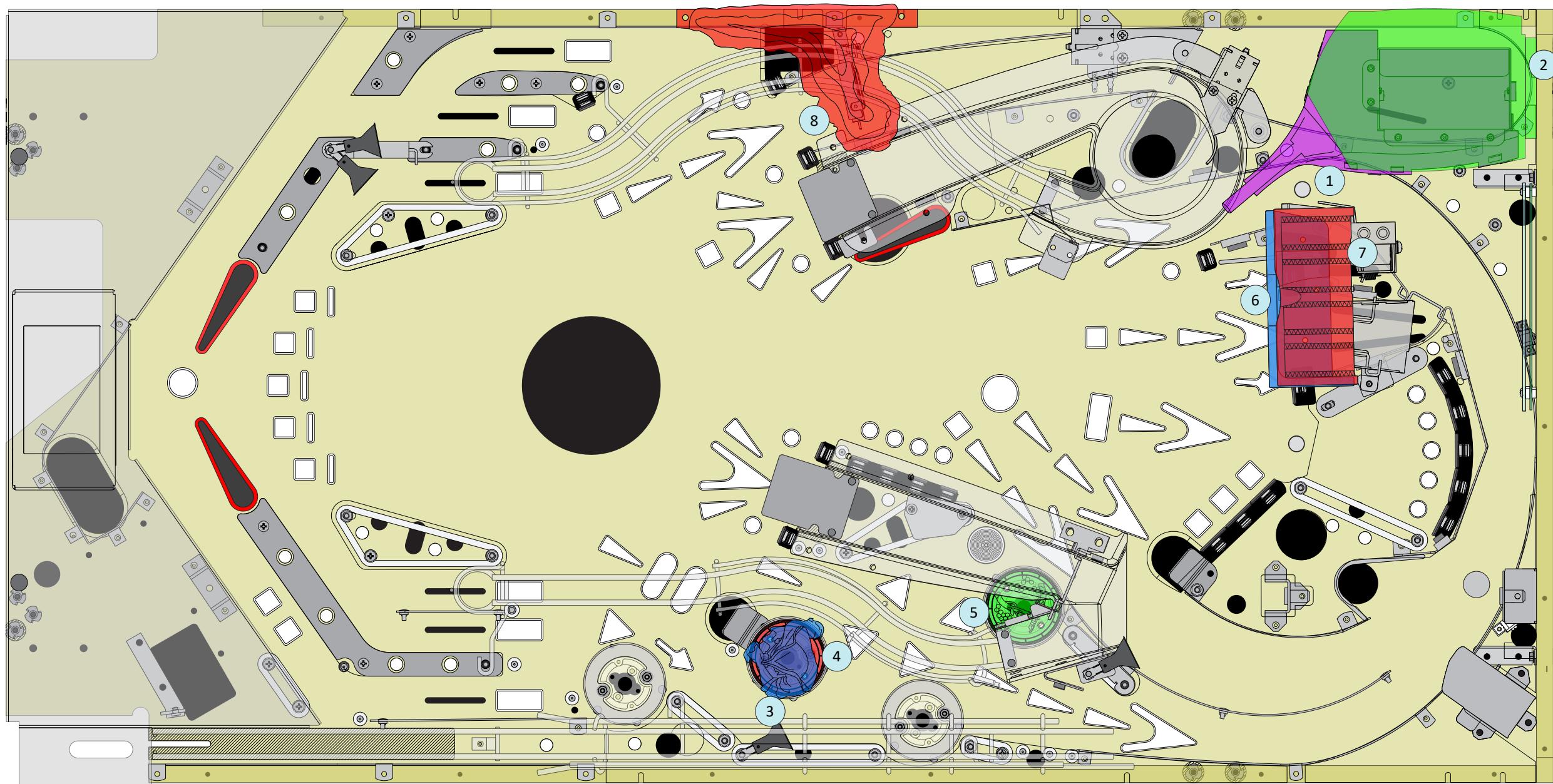


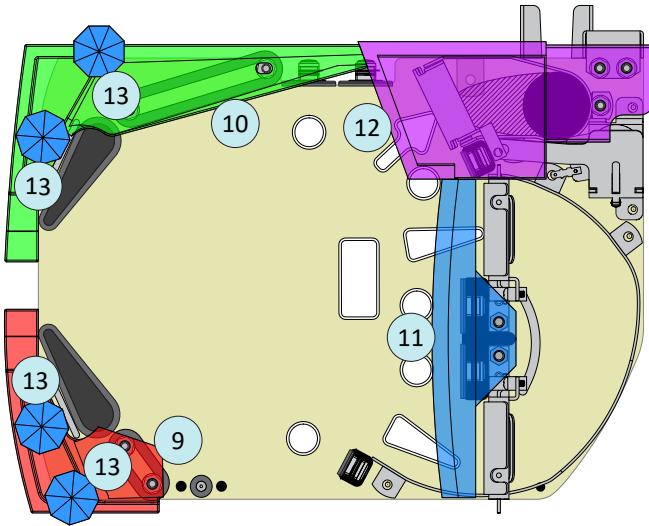


Clear Plastics, Flasher Domes & Flipper Bats

| Item | Part Number | Description | Qty |
|--------|--------------|--|-----|
| 1 | 30-003013-01 | POTC Compass LCD Cover Clear Plastic | 1 |
| 11 | 30-003013-11 | POTC Left Flasher Dome Clear Plastic | 1 |
| 14 | 30-003013-14 | POTC Treasure Chest Clear Plastic | 1 |
| 24 Std | 30-003013-24 | POTC Std Devil's Triangle Spinner Clear Plastic | 1 |
| 25 | 30-003013-25 | POTC Chapter Select Clear Plastic | 1 |
| 26 | 30-003013-26 | POTC Pop Bumper Light Mtg Clear Plastic | 4* |
| 30 | 30-003013-30 | POTC Black Pearl Access VUK Shield Plastic (behind/under PF) | 1 |
| 31 | 30-000089-13 | Flasher Dome w/Tabs, Clear | 2 |
| 32 | 30-000012-00 | Flipper Bat, Black | 3 |
| 33 | 30-000013-00 | Flipper Bat, Black | 2 |
| 34 | 30-000034-02 | GI Light Rod, Acrylic, 1.34" (under PF plastics) | 25 |

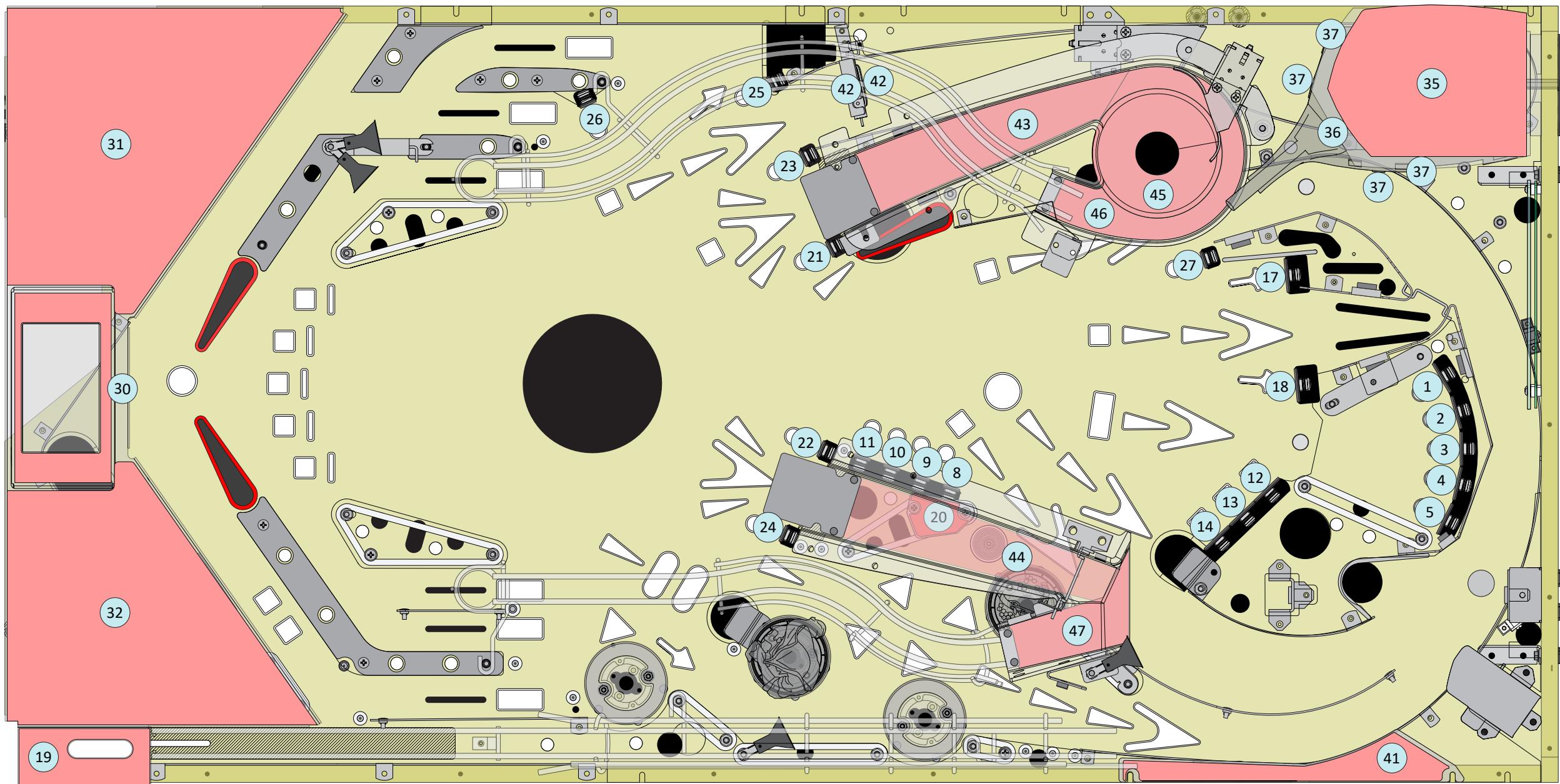
* Qty of 2 in CE/LE games





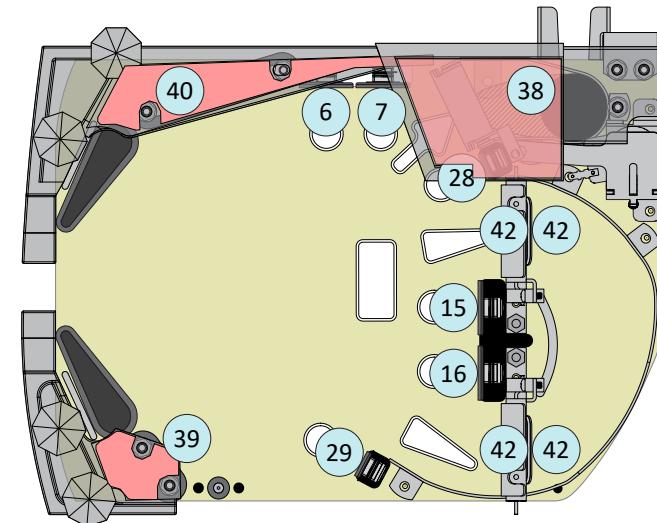
Game Sculptures

| Item | Part Number | Description |
|---------|--------------|--|
| 1 | 32-000043-00 | POTC Tgt Ship Sculpture |
| 2 | 32-000043-10 | POTC Tgt Ship Top Deck Sculpture |
| 3 CE/LE | 32-000044-00 | POTC Pirate Spinning Pop Bumper Top Sculpture |
| 4 CE/LE | 32-000044-01 | POTC Pirate Barrel Spinning Pop Bumper Top Sculpture |
| 5 CE/LE | 32-000044-11 | POTC Guns/Coins Barrel Spinning Pop Bumper Top Sculpture |
| 6 | 32-000045-00 | POTC Treasure Chest Bottom Sculpture |
| 7 | 32-000045-01 | POTC Treasure Chest Cover Sculpture |
| 8 CE/LE | 32-000046-00 | POTC Devil's Triangle Sculpture |
| 9 | 32-000047-00 | POTC Black Pearl Right Front Railing Sculpture |
| 10 | 32-000047-01 | POTC Black Pearl Left Front/Side Railing Sculpture |
| 11 | 32-000047-02 | POTC Black Pearl Spinner Cover Railing Sculpture |
| 12 | 32-000047-03 | POTC Black Pearl Cannon Cover Deck Sculpture |
| 13 | 32-000047-04 | POTC Black Pearl Lantern Sculpture (4 ea) |
| NS CE | 32-000048-00 | POTC CE Right Hinge Barnacle Sculpture |
| NS CE | 32-000048-01 | POTC CE Left Hinge Barnacle Sculpture |
| NS CE | 32-000048-02 | POTC CE Lockdown Bar Barnacle Sculpture |
| NS CE | 32-000048-10 | POTC CE Right Siderail Barnacle Sculpture |
| NS CE | 32-000048-11 | POTC CE Left Siderail Barnacle Sculpture |

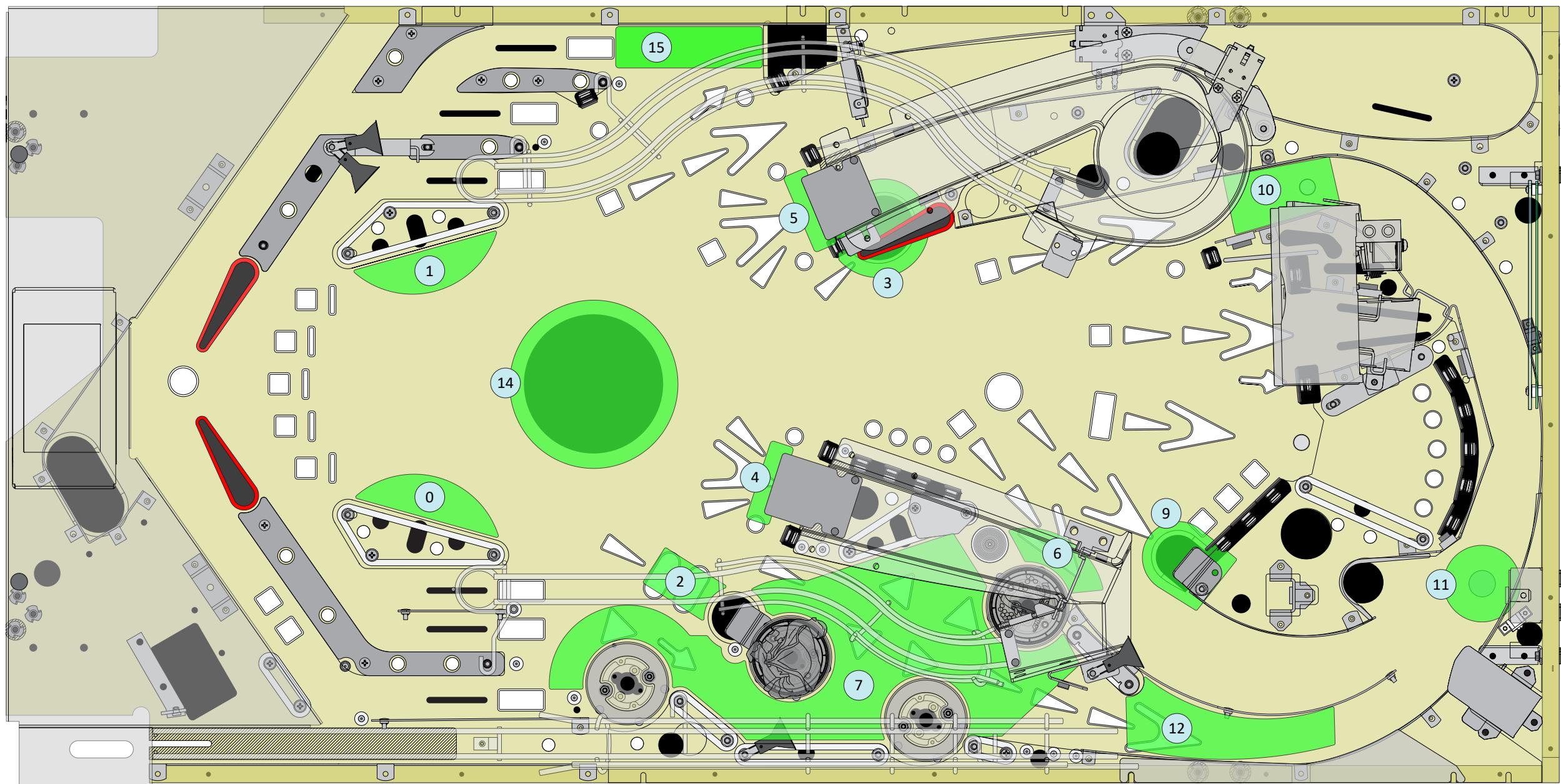


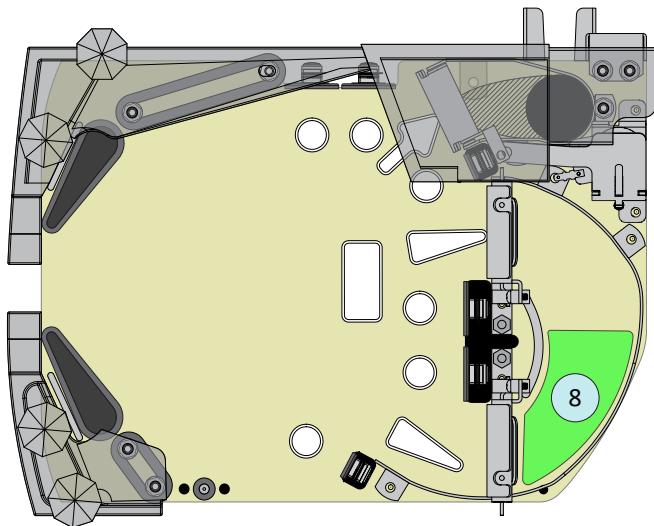
Game Decals

| Item | Part Number | Description | Part of Assy | Drawing |
|------|--------------|---------------------------------------|--------------|---------|
| 1 | 62-000038-01 | POTC Movie 1 Chapter Select Tgt Decal | - | - |
| 2 | 62-000038-02 | POTC Movie 2 Chapter Select Tgt Decal | - | - |
| 3 | 62-000038-03 | POTC Movie 3 Chapter Select Tgt Decal | - | - |
| 4 | 62-000038-04 | POTC Movie 4 Chapter Select Tgt Decal | - | - |
| 5 | 62-000038-05 | POTC Movie 5 Chapter Select Tgt Decal | - | - |
| 6 | 62-000038-06 | POTC Skull Tgt Decal | - | - |
| 7 | 62-000038-07 | POTC Crossbones Tgt Decal | - | - |
| 8 | 62-000038-08 | POTC G Tgt Decal | - | - |
| 9 | 62-000038-09 | POTC O Tgt Decal | - | - |
| 10 | 62-000038-10 | POTC L Tgt Decal | - | - |
| 11 | 62-000038-11 | POTC D Tgt Decal | - | - |
| 12 | 62-000038-12 | POTC M Tgt Decal | - | - |
| 13 | 62-000038-13 | POTC A Tgt Decal | - | - |
| 14 | 62-000038-14 | POTC P Tgt Decal | - | - |
| 15 | 62-000038-15 | POTC Gold Coin #1 Decal | - | - |
| 16 | 62-000038-16 | POTC Gold Coin #2 Decal | - | - |
| 17 | 62-000038-17 | POTC LOAD Tgt Decal | - | - |
| 18 | 62-000038-18 | POTC CHEST Tgt Decal | - | - |
| 19 | 62-000038-19 | POTC Shooter Gauge Decal | - | - |
| 20 | 62-000038-20 | POTC Under Ramp Ball Trap Decal | - | - |
| 21 | 62-000038-21 | POTC 2X Tgt Decal | - | - |
| 22 | 62-000038-22 | POTC 3X Tgt Decal | - | - |
| 23 | 62-000038-23 | POTC 4X Tgt Decal | - | - |
| 24 | 62-000038-24 | POTC 5X Tgt Decal | - | - |
| 25 | 62-000038-25 | POTC 6X Tgt Decal | - | - |
| 26 | 62-000038-26 | POTC Spot Character Tgt Decal | - | - |
| 27 | 62-000038-27 | POTC Pirate Tgt Decal | - | - |
| 28 | 62-000038-28 | POTC LOAD Tgt Decal | - | - |
| 29 | 62-000038-29 | POTC CANNON Tgt Decal | - | - |



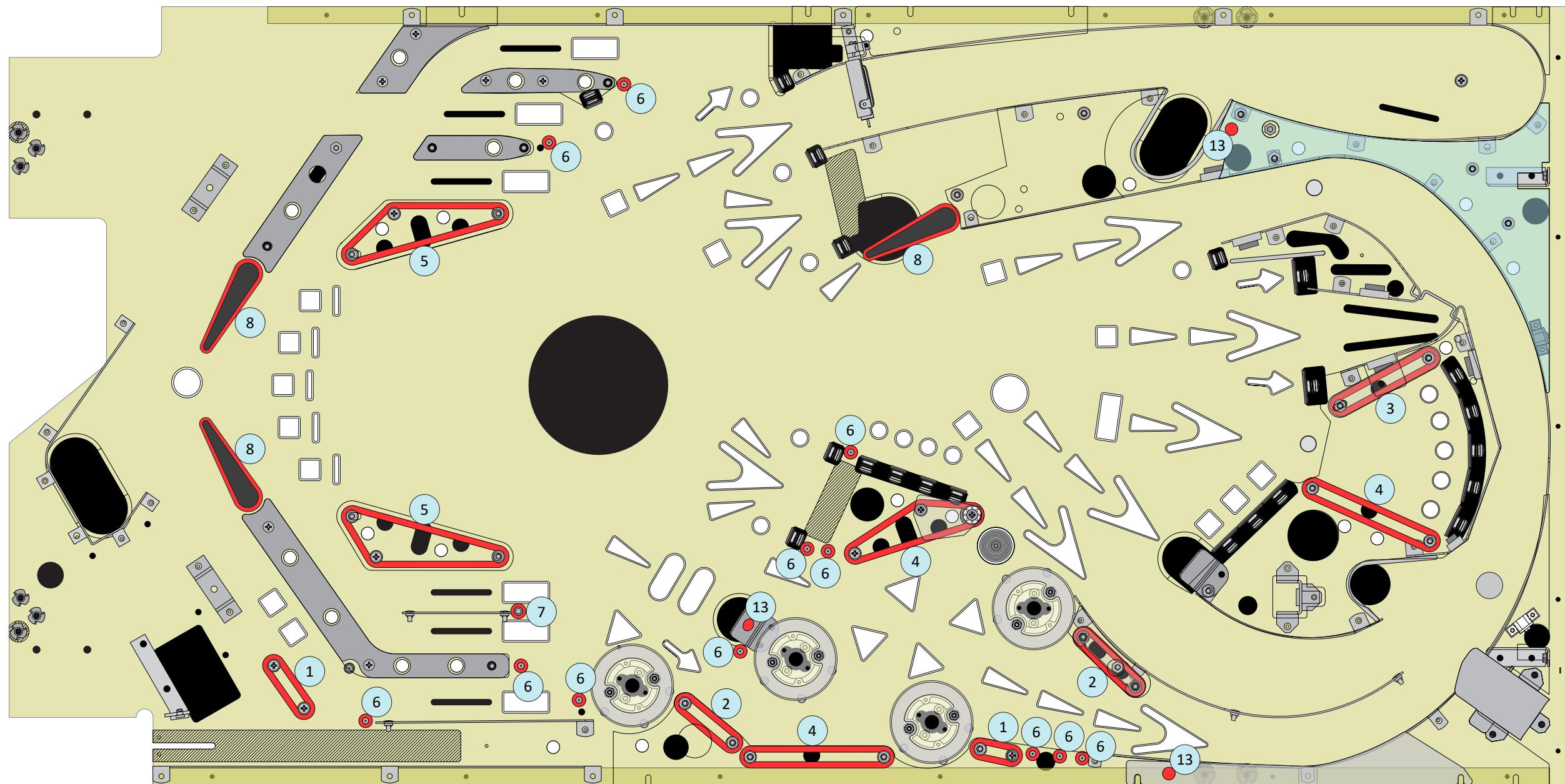
| Item | Part Number | Description | Part of Assy | Drawing |
|------|--------------|--|--------------|------------|
| 30 | 62-000038-30 | POTC Compass LCD Frame Decal | 52-000077-00 | C-68 |
| 31 | 62-000038-31 | POTC Bottom Arch Decal, Left Side | 52-000077-00 | C-68 |
| 32 | 62-000038-32 | POTC Bottom Arch Decal, Right Side | 52-000077-00 | C-68 |
| NS | 62-000038-33 | POTC Cabinet Headphone Jack Decal | 51-000064-00 | C-28 |
| NS | 62-000038-34 | POTC Coin Door Decal | 40-000006-20 | - |
| 35 | 62-000038-35 | POTC Tgt Ship Top Deck Decal | 52-000063-0X | C-52 |
| 36 | 62-000038-36 | POTC Tgt Ship Union Jack Decal | 52-000063-0X | C-52 |
| 37 | 62-000038-37 | POTC Tgt Ship Cannon Door Decal (14 ea) | 52-000073-01 | C-52, C-59 |
| 38 | 62-000038-38 | POTC Black Pearl Cannon Cover Deck Decal | - | - |
| 39 | 62-000038-39 | POTC Black Pearl Right Rigging Decal | - | - |
| 40 | 62-000038-40 | POTC Black Pearl Left Rigging Decal | - | - |
| 41 | 62-000038-41 | POTC Plastics Protector Brkt Decal | - | - |
| 42 | 62-000039-00 | Prism Spinner Decal (6 ea) | 51-000089-0X | C-34 |
| 43 | 62-000037-01 | POTC Maelstrom Ramp Incline Decal | | |
| 44 | 62-000037-02 | POTC Mini PF Access Ramp Decal, Left | | |
| 45 | 62-000037-03 | POTC Maelstrom Ramp Bowl Decal | | |
| 46 | 62-000037-04 | POTC Maelstrom Ramp Circle Decal | | |
| 47 | 62-000037-05 | POTC Mini PF Access Ramp Decal, Right | | |

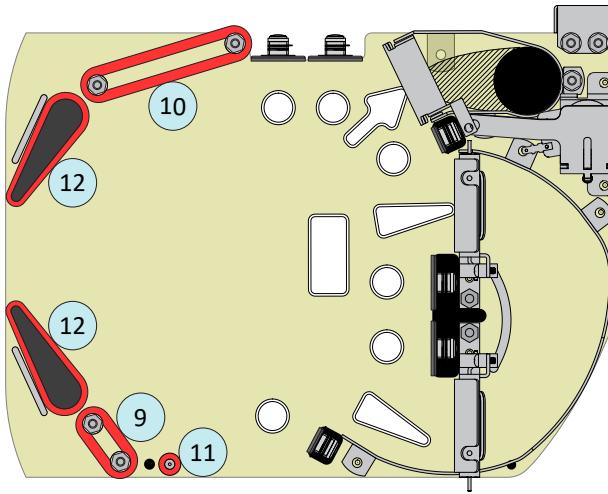




Mylar Playfield Protectors

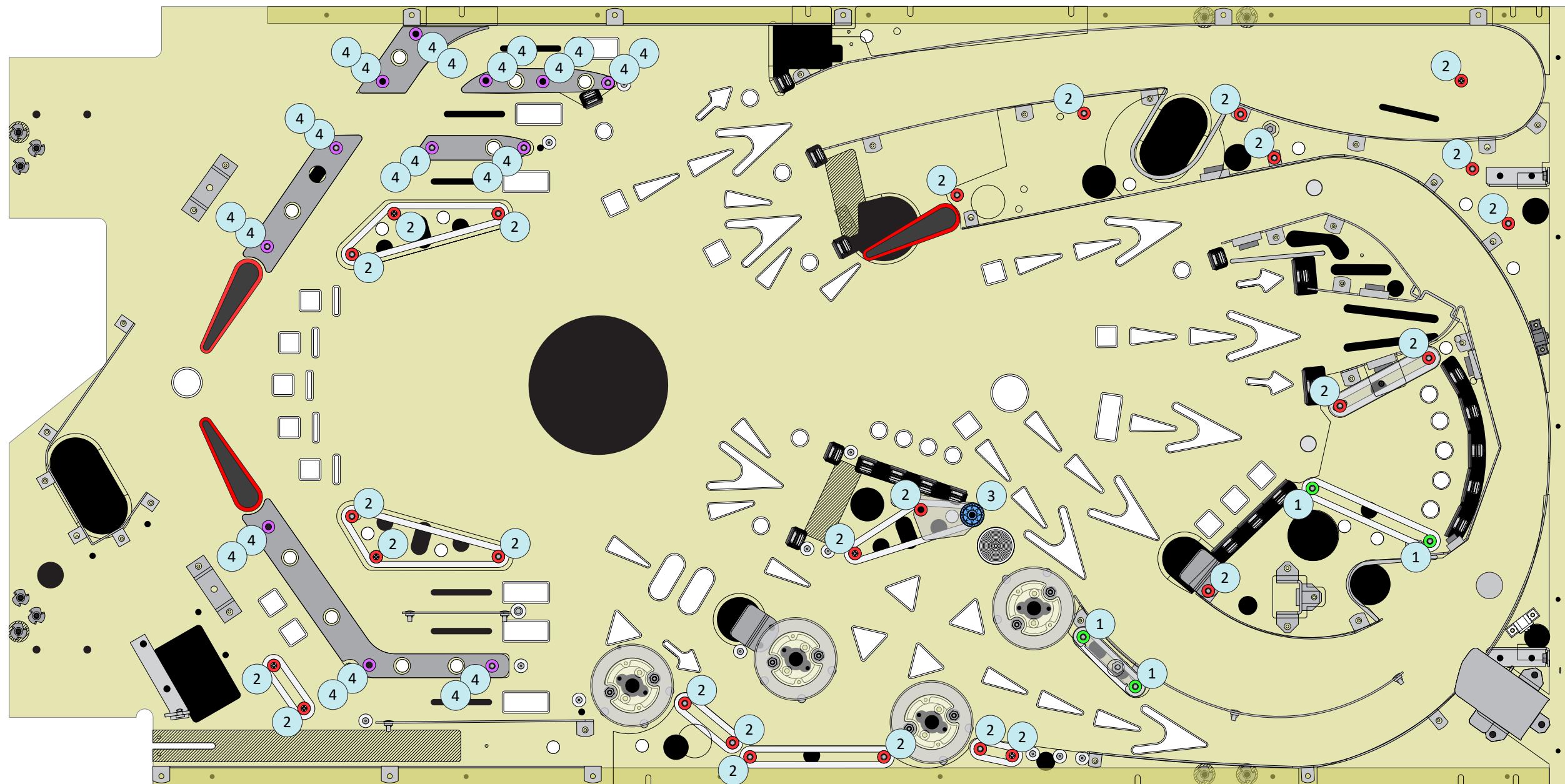
| Item | Part Number | Description |
|------|--------------|---|
| 0 | 62-000041-00 | POTC Clear Mylar Right Sling Protector |
| 1 | 62-000041-01 | POTC Clear Mylar Left Sling Protector |
| 2 | 62-000041-02 | POTC Clear Mylar Tortuga VUK Protector |
| 3 | 62-000041-03 | POTC Clear Mylar Bayou Area Protector |
| 4 | 62-000041-04 | POTC Clear Mylar Right Ramp Flap Protector |
| 5 | 62-000041-05 | POTC Clear Mylar Left Ramp Flap Protector |
| 6 | 62-000041-06 | POTC Clear Mylar Upper Pop Bumper Protector |
| 7 | 62-000041-07 | POTC Clear Mylar Pop Bumper Area Protector |
| 8 | 62-000041-08 | POTC Clear Mylar Black Pearl PF Protector |
| 9 | 62-000041-09 | POTC Clear Mylar Captain's Quarters Area Protector |
| 10 | 62-000041-10 | POTC Clear Mylar Treasure Chest Drop Protector |
| 11 | 62-000041-11 | POTC Clear Mylar Adj Core Magnet Area Protector |
| 12 | 62-000041-12 | POTC Clear Mylar Shooter Lane Drop Protector |
| NS | 62-000041-13 | POTC Clear Mylar Siderail Protector (2 ea, detail on pg C-36) |
| 14 | 62-000041-14 | POTC Clear Mylar Spinning Map Area Protector |
| 15 | 62-000041-15 | POTC Clear Mylar Depths Kickout Protector |

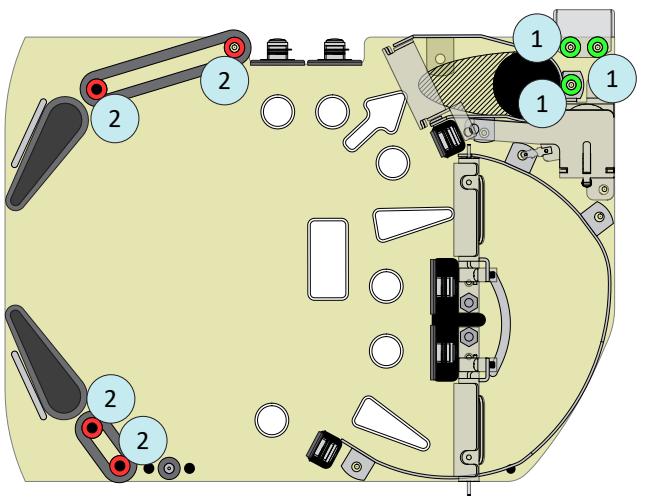




Rubber Rings, Bumpers & Sleeves

| Item | Part Number | Description | Main PF | Black Pearl |
|------|-----------------|--|---------|-------------|
| 1 | 25-002004-12-13 | Silicone Ring, 3/4", Clear | 2 | - |
| 2 | 25-002004-16-13 | Silicone Ring, 1", Clear | 2 | - |
| 3 | 25-002004-24-13 | Silicone Ring, 1-1/2", Clear | 1 | - |
| 4 | 25-002004-32-13 | Silicone Ring, 2", Clear | 3 | - |
| 5 | 25-002004-40-13 | Silicone Ring, 2-1/2", Clear | 2 | - |
| 6 | 25-006005-06-13 | 3/8" OD Mini Post Silicone, Clear | 12 | - |
| 7 | 25-006012-13 | Post Polyurethane Sleeve, 1-1/16", Clear | 1 | - |
| 8 | 25-002001-02 | Flipper Rubber Ring, 1-1/2", Red | 3 | - |
| 9 | 25-002003-07-0 | Rubber Ring, 7/16", Black | - | 1 |
| 10 | 25-002003-24-0 | Rubber Ring, 1-1/2", Black | - | 1 |
| 11 | 25-006003-06-0 | 3/8" OD Mini Post Rubber, Black | - | 1 |
| 12 | 25-002002-00 | Mini Flipper Rubber Ring, 1", Black | - | 2 |
| 13 | 25-009009-00 | Clear Rubber Bumper Dot, 7/16" Diam x 13/64" H | 3 | - |



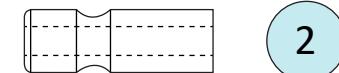


Plastic Playfield Posts

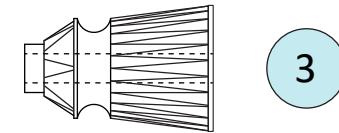
| Item | Part Number | Description | Main PF | Black Pearl |
|------|--------------|---|---------|-------------|
| 1 | 30-009000-13 | 1-3/16" Poly Post, Clear | 4 | 3 |
| 2 | 30-009004-13 | 1-1/16" Standard Poly Post, Clear | 26 | 4 |
| 3 | 30-009005-13 | Single Star Poly Post, Clear | 1 | - |
| 4 | 30-000083-04 | #8 Nylon Round Spacer, Snap-In, Black, 0.666" | 24 | - |



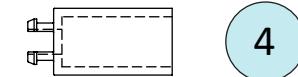
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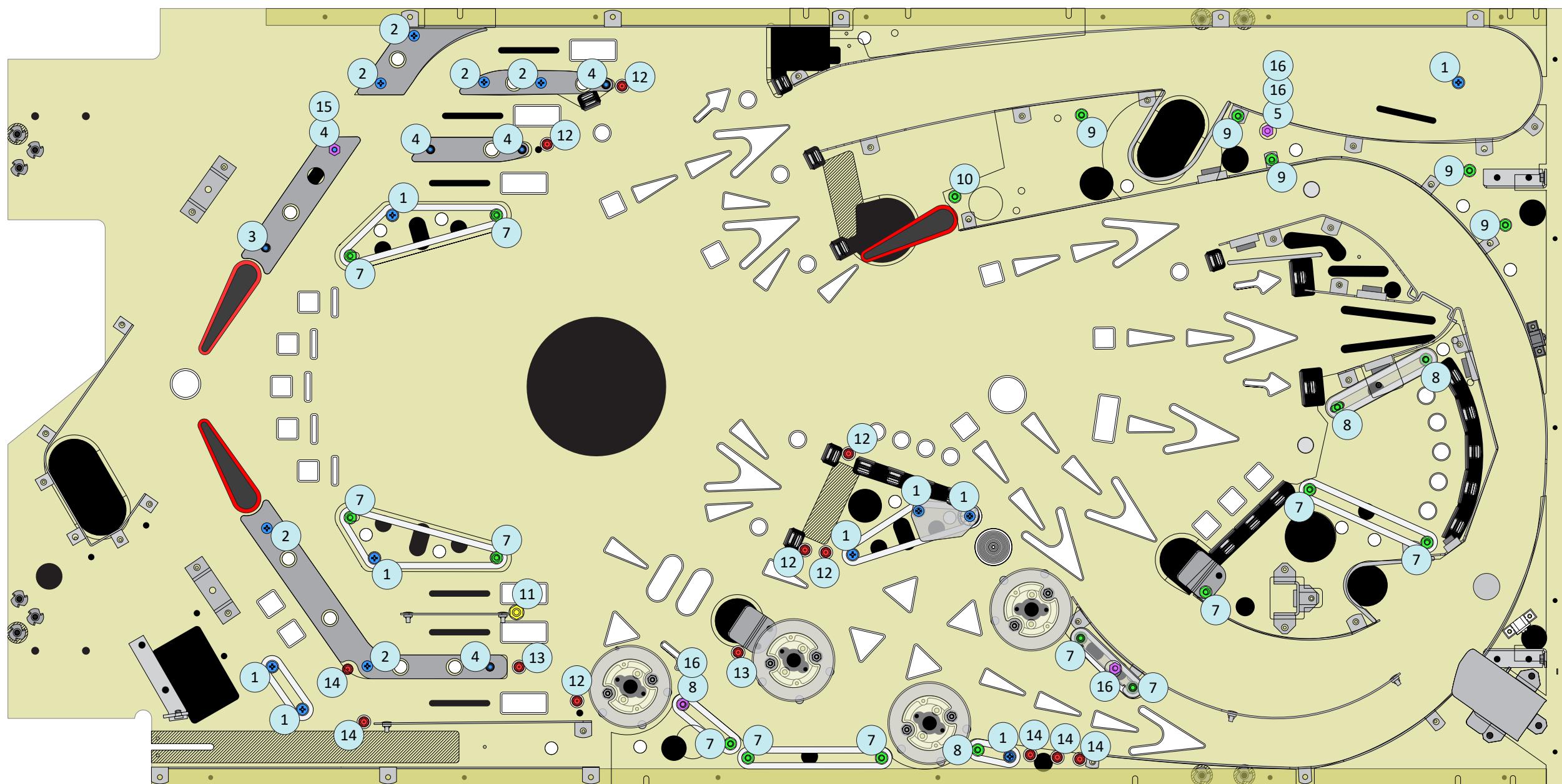
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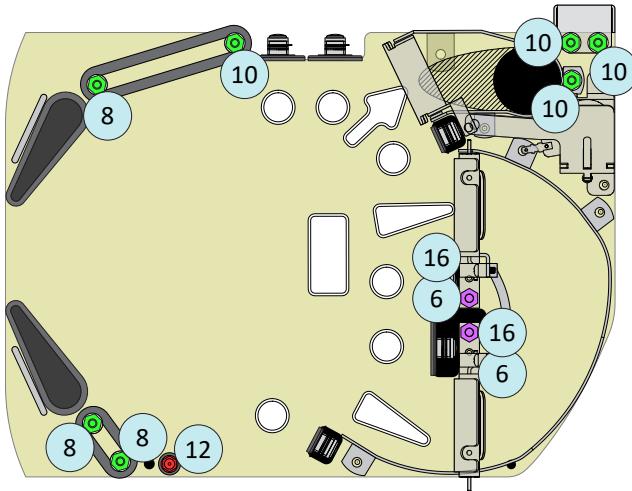


3



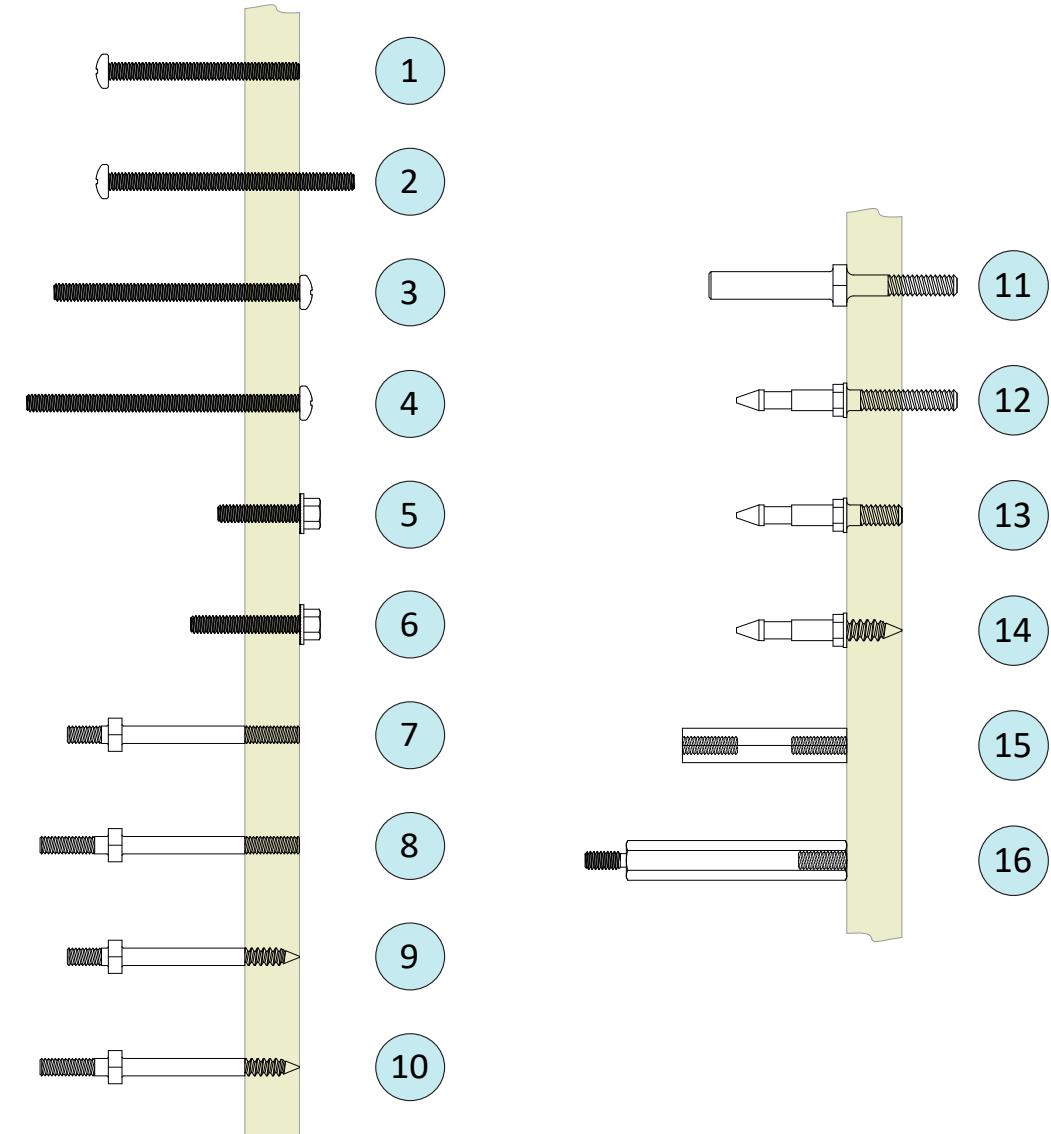
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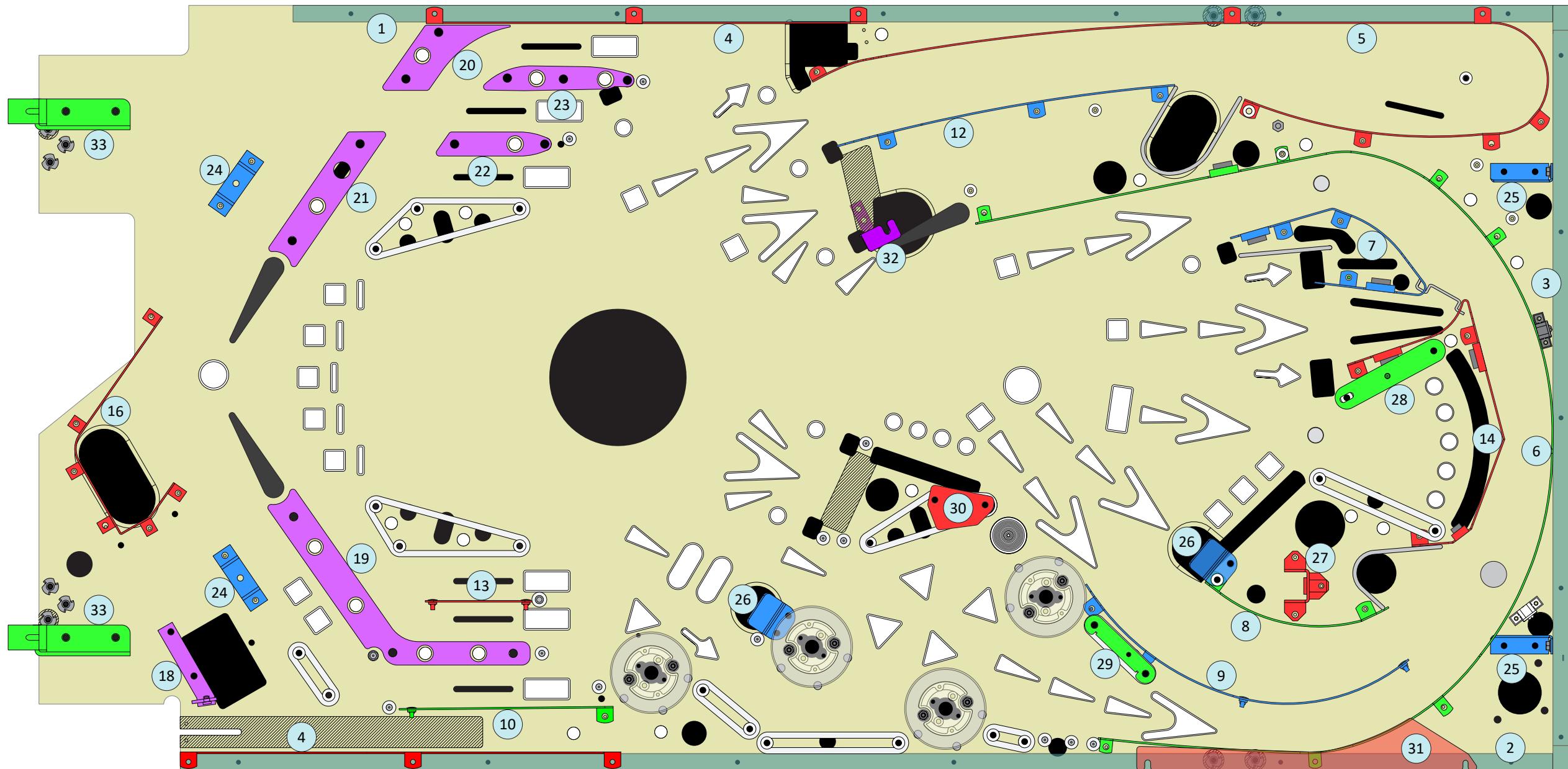




Metal Playfield Posts, Screws & Hex Spacers

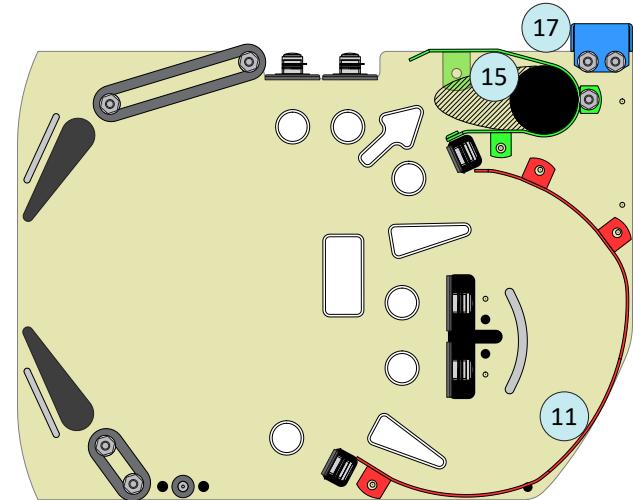
| Item | Part Number | Description | Main PF | Black Pearl |
|------|--------------|---|---------|-------------|
| 1 | 80-000008-28 | 8-32 x 1-3/4" PPH MS | 9 | - |
| 2 | 80-000008-36 | 8-32 x 2-1/4" PPH MS | 6 | - |
| 3 | 80-000008-36 | 8-32 x 2-1/4" PPH MS | 1 | - |
| 4 | 80-000008-40 | 8-32 x 2-1/2" PPH MS | 5 | - |
| 5 | 80-002008-12 | 8-32 x 3/4" HWH Phillips MS, Serrated | 1 | - |
| 6 | 80-002008-16 | 8-32 X 1" HWH Phillips MS, Serrated | - | 2 |
| 7 | 97-000008-00 | 8-32/8-32 Butyrate Fastener Post, 2-1/8" | 12 | - |
| 8 | 97-000008-01 | 8-32/8-32 Ramp Fastener Post, 2-3/8" | 4 | 3 |
| 9 | 97-000008-02 | 8-32/WS Butyrate Fastener Post, 2-1/8" | 5 | - |
| 10 | 97-000008-03 | 8-32/WS Ramp Fastener Post, 2-3/8" | 1 | 4 |
| 11 | 97-000009-00 | 5/16" Hex Sleeve Post, 2-1/4" | 1 | - |
| 12 | 97-000010-00 | Steel Mini Post, 10-32, 2" | 6 | 1 |
| 13 | 97-000010-01 | Steel Mini Post, 10-32, 1-1/2" | 2 | - |
| 14 | 97-000010-02 | Steel Mini Post, #10, WS, 1-1/2" | 5 | - |
| 15 | 95-000508-24 | 5/16" x 1-1/2" Hex Spacer, F-F, 8-32, Black | 1 | - |
| 16 | 95-000518-32 | 5/16" x 2" Hex Spacer, M-F, 8-32, Black | 4 | 2 |

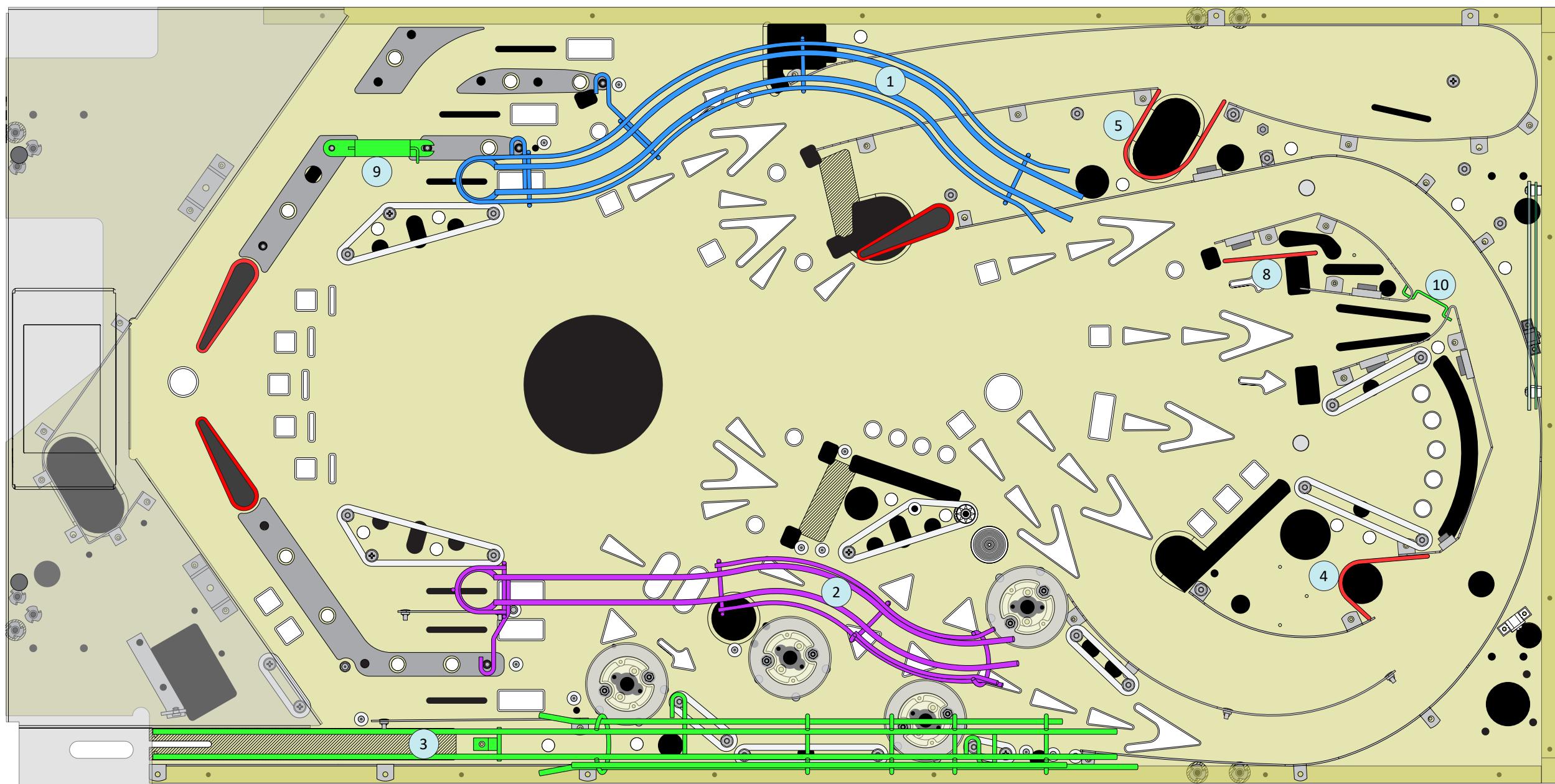




Woodrails, Flatrails, Brackets & Ball Deflectors

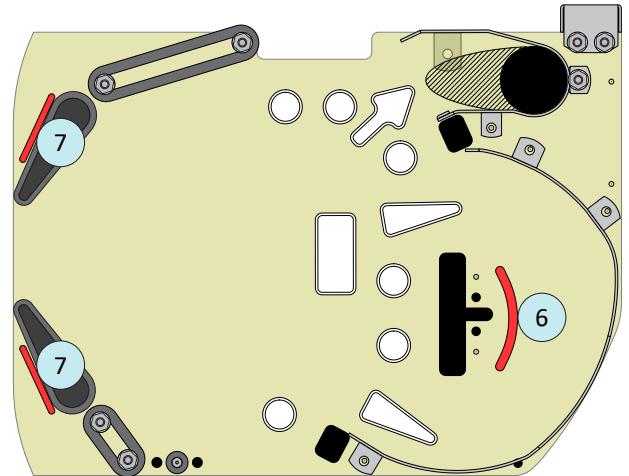
| Item | Part Number | Description | Qty |
|------|--------------|--|-----|
| 1 | 05-008001-05 | Playfield Woodrail w/Black Vinyl Cover, 41.25" | 1 |
| 2 | 05-008001-06 | Playfield Woodrail w/Black Vinyl Cover, 37.9" | 1 |
| 3 | 05-009006-00 | POTC Back Panel Wood | 1 |
| 4 | 12-000040-00 | POTC Left Return Lane, Outer Flatrail | 2 |
| 5 | 12-000040-01 | POTC Left Turnaround Loop Flatrail | 1 |
| 6 | 12-000040-02 | POTC Main Loop, Outer Flatrail | 1 |
| 7 | 12-000040-03 | POTC Chest Lane, Left Flatrail | 1 |
| 8 | 12-000040-07 | POTC Upper Flipper Loop, Left Flatrail | 1 |
| 9 | 12-000040-08 | POTC Upper Flipper Loop, Right Flatrail | 1 |
| 10 | 12-000040-09 | POTC Shooter Lane, Inner Flatrail | 1 |
| 11 | 12-000040-11 | POTC Black Pearl PF Loop, Outer Flatrail | 1 |
| 12 | 12-000040-14 | POTC Left Turnaround Loop, Right Side Flatrail | 1 |
| 13 | 12-000040-16 | POTC Right Return Lanes Divider Flatrail | 1 |
| 14 | 12-000040-17 | POTC Chapter Tgts/Chest Lane, Right Flatrail | 1 |
| 15 | 12-000040-18 | POTC Black Pearl PF Cannon Load Flatrail | 1 |
| 16 | 12-000016-01 | Ball Outhole Flatrail, Extended | 1 |
| 17 | 10-000241-00 | POTC Black Pearl PF Clevis Pin Brkt | 1 |
| 18 | 10-000111-00 | Ball Stop Brkt | 1 |
| 19 | 10-000242-00 | POTC Return Lane Plate, Right | 1 |
| 20 | 10-000242-01 | POTC Return Lane Plate, Left, Upper | 1 |
| 21 | 10-000242-02 | POTC Return Lane Plate, Left, Lower | 1 |
| 22 | 10-000242-10 | POTC Left Return Lanes Divider Plate, Right | 1 |
| 23 | 10-000242-11 | POTC Left Return Lanes Divider Plate, Left | 1 |
| 24 | 10-000215-00 | Bottom Arch Hold Brkt | 2 |
| 25 | 10-000162-00 | Back Panel Support Brkt | 2 |
| 26 | 10-003001-03 | Snubber Brkt, Low Profile | 2 |
| 27 | 10-005041-01 | Mini PF Pivot Brkt Weldment, Playfield | 1 |
| 28 | 10-000250-03 | POTC Treasure Chest Mtg Plate | 1 |
| 29 | 10-000247-02 | POTC Mini PF Access Ramp Support Plate | 1 |
| 30 | 10-000257-00 | POTC Ball Trap Prevent Plate, Upper Sling | 1 |
| 31 | 10-000279-00 | POTC Plastics Protector Brkt | 1 |
| 32 | 10-100002-00 | Maelstrom Ramp Support Brkt | 1 |
| 33 | 10-000014-10 | Playfield Hanger Brkt, 11/17 | 2 |

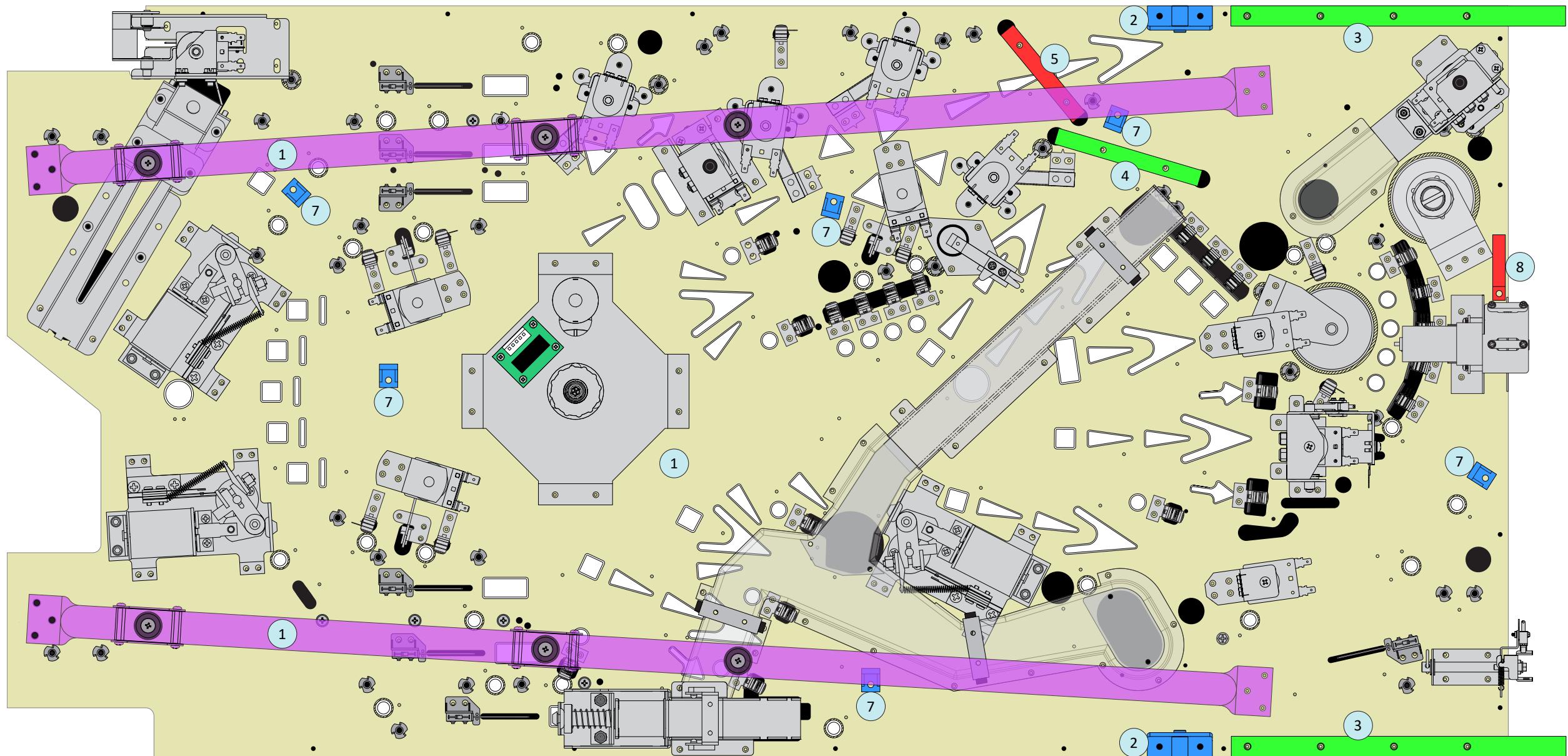


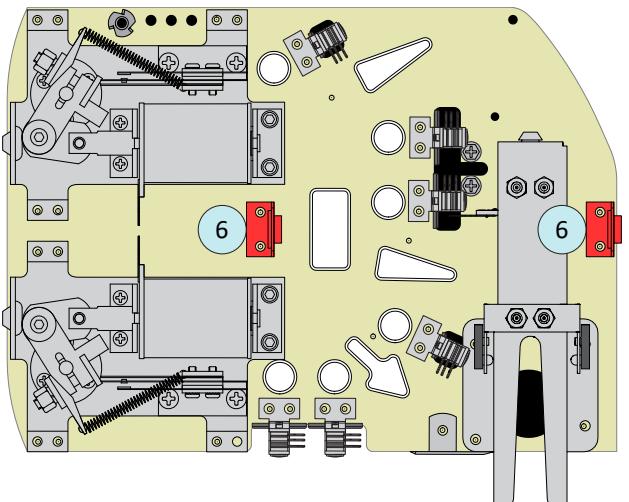


Wire Ramps, Ball Guide Rails & Ball Gates

| Item | Part Number | Description |
|------|--------------|--|
| 1 | 13-000015-00 | POTC Maelstrom/Left Return Wire Ramp |
| 2 | 13-000016-00 | POTC Black Pearl PF/Right Return Wire Ramp |
| 3 | 13-000017-00 | POTC Shooter Lane Wire Ramp |
| 4 | 13-003030-00 | POTC Main Loop Subway Entrance Ball Guide Rail |
| 5 | 13-003030-01 | POTC Turnaround Loop Subway Entrance Ball Guide Rail |
| 6 | 13-003030-02 | POTC Black Pearl Mini Loop Ball Guide Rail |
| 7 | 13-003000-02 | 1.25" Straight Ball Guide Rail, Mini (2 ea) |
| 8 | 13-003000-12 | 2.50" Straight Ball Guide Rail, Mini |
| 9 | 51-000051-01 | One Way Gate Assy, 3.29" |
| a) | 10-000150-03 | One Way Gate Brkt, 3.29" |
| b) | 13-003022-03 | One Way Gate Wireform, 2.02" |
| 10 | 13-003022-10 | One Way Gate Wireform, 1.61", Low Profile |

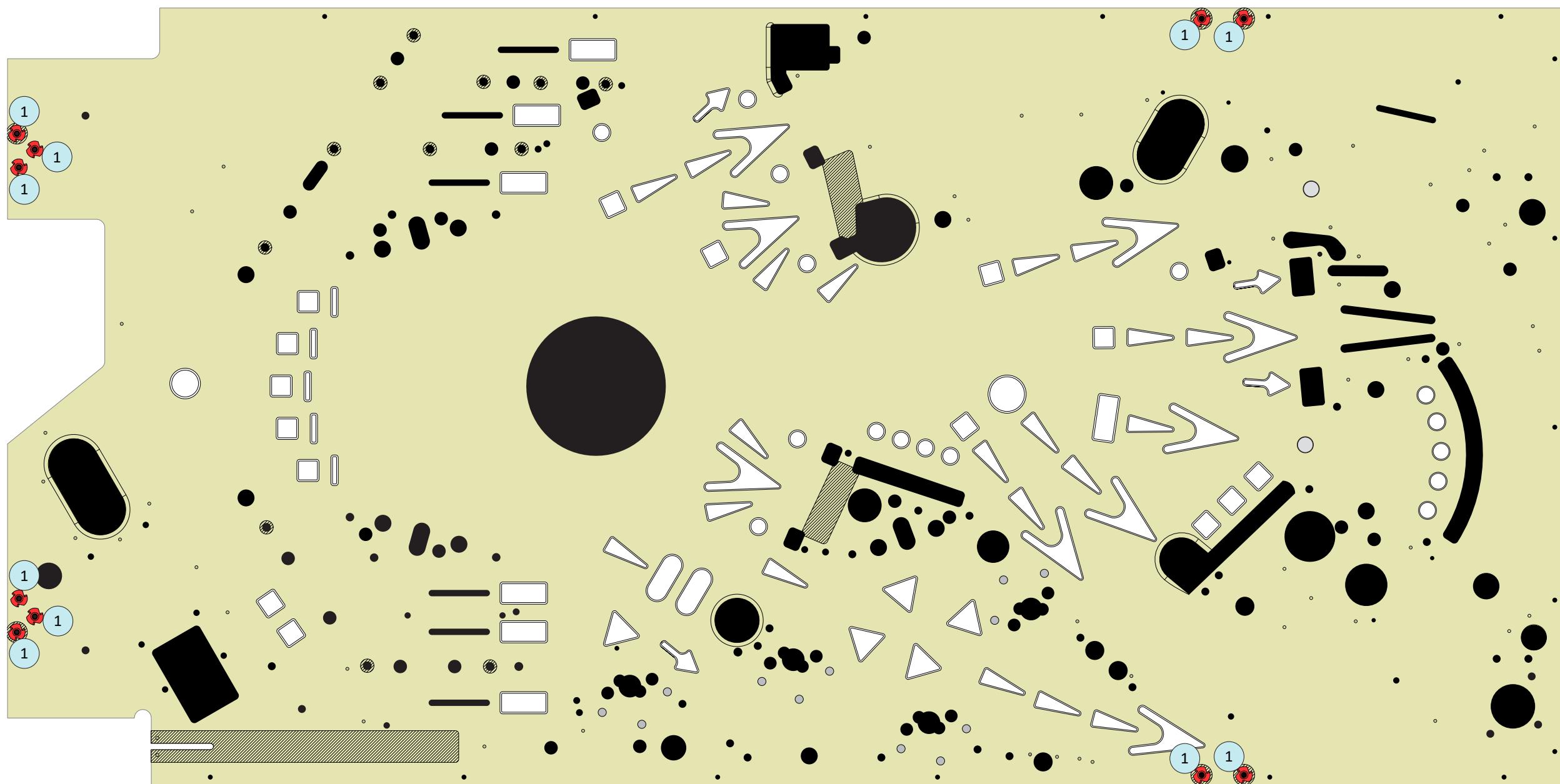






Under-Playfield Supports & Brackets

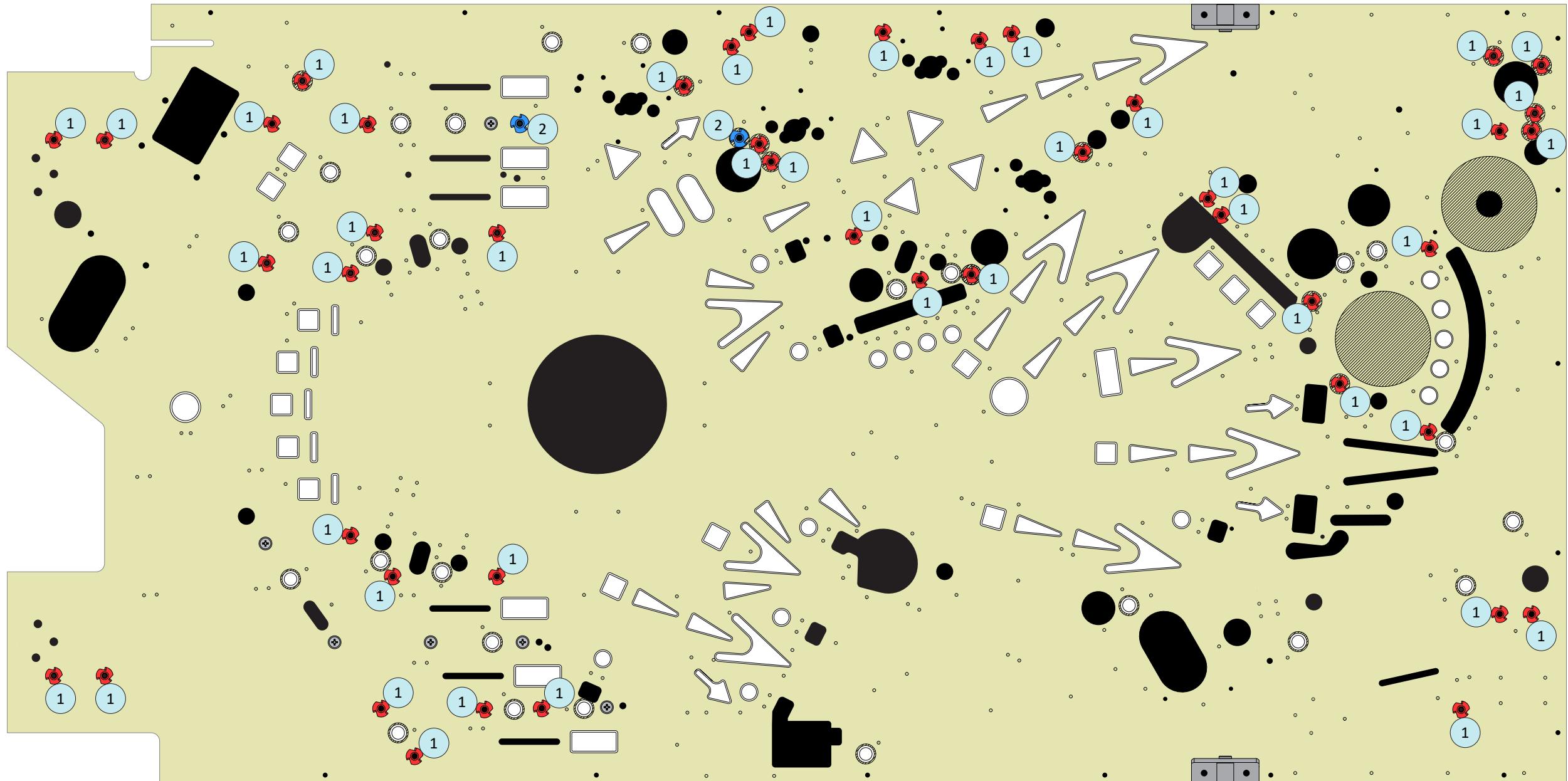
| Item | Part Number | Description | Qty |
|------|--------------|---------------------------------------|-----|
| 1 | 51-100001-00 | Playfield Support Tube Assy, TH | 2 |
| a) | 10-000093-00 | Playfield Support Tube | 2 |
| b) | 10-000280-00 | PF Support Tube Foot Protect Brkt | 4 |
| c) | 25-009008-00 | Playfield Support Rubber Spacer | 6 |
| d) | 80-000006-04 | 6-32 x 1/4" PPH MS | 16 |
| e) | 80-007010-28 | 10-24 x 1-3/4" Phillips TH MS | 6 |
| f) | 91-000011-00 | 10-24 Nylon Stop Nut | 6 |
| g) | 94-001406-16 | 1/4" x 1" Hex Spacer, F-F, 6-32, Zinc | 8 |
| 2 | 11-007001-10 | Playfield Hinge Brkt Assy, 6/16 | 2 |
| 3 | 10-000013-01 | Playfield Lift Support Brkt, 10.3" | 2 |
| 4 | 10-000248-03 | POTC Right Inner Orbit Opto Brkt | 1 |
| 5 | 10-000248-04 | POTC Right Outer Orbit Opto Brkt | 1 |
| 6 | 10-005043-00 | POTC PF Rock Bearing Brkt Assy | 2 |
| 7 | 30-000033-01 | Nylon Cable Ladder, 3.5" | 6 |
| 8 | 30-000052-24 | Nylon Cable Clamp, Closed, 1-1/2" | 1 |

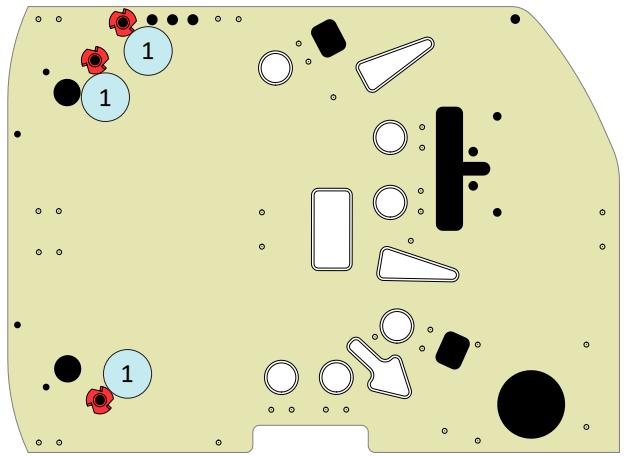


T-Nuts

Above Playfield

| Item | Part Number | Description | Main PF | Black Pearl |
|-------------|--------------------|--------------------------------|----------------|--------------------|
| 1 | 91-004008-00 | 8-32 x 1/4" T-Nut, 1/2" Flange | 10 | - |





T-Nuts

Under Playfield

| Item | Part Number | Description | Main PF | Black Pearl |
|------|--------------|------------------------------------|---------|-------------|
| 1 | 91-004008-00 | 8-32 x 1/4" T-Nut, 1/2" Flange | 45 | 3 |
| 2 | 91-004010-00 | 10-32 x 5/16" T-Nut, 45/64" Flange | 2 | - |

Assembly Mounting Hardware

| Assembly | | | | Mounting Hardware | | |
|--------------|--|-------------------------|---------|-------------------|---|-----|
| Part Number | Name | Mounts To | Drawing | Part Number | Description | Qty |
| 10-000234-00 | Backbox Vent Hole Cover, Louvered | | | 80-000108-32 | 8-32 x 2" PPH MS, Black | 4 |
| 10-000110-01 | Fan Guard, 4.69" | | | 91-000008-00 | 8-32 Nylon Stop Nut | 4 |
| 51-006013-00 | Backbox Fan & Cable Assy | Backbox, Through | C-4 | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.443" OD, 0.06" TH | 4 |
| 51-005043-00 | 27" LCD Pivot/Swing Assy | Backbox, Through | C-4 | 80-002025-12 | 1/4-20 x 3/4" HWH Phillips MS, Serrated | 3 |
| 51-005032-10 | 27" LCD Monitor Assy, Backbox PCBs | 51-005043-00 Assy | C-4 | 91-002025-00 | 1/4-20 Flange Nut | 4 |
| 42-005002-00 | Roto-Lock Receptacle | Backbox, Through | C-4 | 91-000011-00 | 10-24 Nylon Nut | 2 |
| | | | | 92-000010-00 | #10 Flat Washer, 0.226" ID, 0.507" OD | 2 |
| | | | | 81-005011-28 | 10-24 x 1-3/4" Black Carriage Bolt | 2 |
| 51-000032-01 | Knocker Assy, Vertical | Backbox, Interior | C-4 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 5 |
| 51-005053-00 | Backbox Speaker Bar Assy, Wood | Backbox, Interior Brkts | C-4 | 80-008108-16 | 8-32 x 1" TP Torx MS, Black | 2 |
| | | | | 92-000108-00 | #8 Flat Washer, Black | 2 |
| 51-005041-00 | USB Camera Assy | Backbox, Interior | C-4 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |
| 51-005044-02 | Backbox Mount Solid State Drive Assy, 60GB | Backbox, Interior | C-4 | 82-002006-08 | #6 x 1/2" HWH Phillips SMS | 4 |
| 42-005001-00 | Roto-Lock Latch | Cabinet, Through | C-2 | 91-000011-00 | 10-24 Nylon Stop Nut | 2 |
| | | | | 92-000010-00 | #10 Flat Washer, 0.226" ID, 0.507" OD | 2 |
| | | | | 81-005011-28 | 10-24 x 1-3/4" Carriage Bolt, Black | 2 |
| 51-005023-00 | Line Filter Box Assy | Cabinet, Interior | C-2 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |
| 10-000003-01 | Cabinet Vent Hole Grill, 3" (2) | Cabinet, Interior | C-2 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 8 |
| 10-000010-01 | Line Cord Cover Plate, No Cutout | Cabinet, Exterior | C-2 | 80-002008-16 | 8-32 x 1" HWH Phillips MS, Serrated | 2 |
| 10-000006-00 | Cabinet Leg Mtg Brkt (4) | Cabinet, Interior | C-2 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 24 |
| 10-000133-00 | Cabinet Leg Brkt, Decal Protector (4) | Cabinet, Exterior | C-2 | 82-006006-08 | #6 x 1/2" PFH SMS | 8 |
| 10-000031-01 | Cabinet Leg Assy, 30.5", Chrome (4) | Cabinet, Through | C-2 | 90-008038-40 | Leg Bolt, Acorn Head, 3/8-16 x 2-3/4" | 8 |
| 10-000031-0# | Cabinet Leg Assy, 30.5" (Powder Coated, 4) | Cabinet, Through | C-2 | 90-008038-40-0 | Leg Bolt, Acorn Head, 3/8-16 x 2-3/4", Black | 8 |
| 16-005000-02 | Main Transformer, 2/16 | Cabinet, Through | C-2 | 80-002025-10 | 1/4-20 x 5/8" HWH Phillips MS, Serrated | 4 |
| | | | | 91-004025-00 | 1/4-20 T-Nut, 1/2" Diameter | 4 |
| 18-000005-01 | Flipper Switch, Double Contact (Right) | Cabinet, Interior | C-2 | 10-000022-01 | Curved Switch Plate | 1 |
| | | | | 82-002006-20 | #6 x 1-1/4" HWH SMS | 2 |
| 18-000005-01 | Flipper Switch, Double Contact (Left) | Cabinet, Interior | C-2 | 10-000022-01 | Curved Switch Plate | 1 |
| | | | | 82-002006-20 | #6 x 1-1/4" HWH SMS | 2 |

| Assembly | | | | Mounting Hardware | | |
|--------------|-------------------------------------|-------------------|---------|-------------------|---|-----|
| Part Number | Name | Mounts To | Drawing | Part Number | Description | Qty |
| 51-005001-01 | Power Box Assy, Front Outlet | Cabinet, Interior | C-2 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 8 |
| 51-005027-01 | Shaker Motor Assy | Cabinet, Interior | C-2 | 80-002008-10 | 8-32 x 5/8" HWH Phillips MS, Serrated | 4 |
| | | | | 91-004008-00 | 8-32 T-Nut, 1/2" Diameter | 4 |
| 51-000028-00 | Plumb Bob Tilt Assy | Cabinet, Interior | C-2 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |
| 51-000087-0X | Ball Shooter Assy (all finishes) | Cabinet, Through | C-2 | 80-002010-08 | 10-32 x 1/2" HWH Phillips MS, Serrated | 3 |
| 51-000035-00 | Door & Interlock Switch Assy | Cabinet, Interior | C-2 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |
| 40-00006-20 | USA Coin Door Assy | | | | | |
| 40-000011-74 | European Coin Door Assy | Cabinet, Through | C-2 | 81-005125-20 | 1/4-20 x 1-1/4" Carriage Bolt, Black | 4 |
| | | | | 91-002025-00 | 1/4-20 flange Nut | 4 |
| 10-000026-00 | Cashbox Lock Brkt | Cabinet, Through | C-2 | 80-002010-08 | 10-32 x 1/2" HWH Phillips MS, Serrated | 2 |
| 51-000064-00 | Cabinet Headphone Jack Assy | Cabinet, Through | C-2 | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.443" OD, 0.06" TH | 4 |
| | | | | 91-000008-00 | 8-32 Nylon Stop Nut | 4 |
| 10-000033-0# | PF Support/Slide Brkt (2) | Cabinet, Interior | C-2 | 80-002010-08 | 10-32 x 1/2" HWH Phillips MS, Serrated | 8 |
| | | | | 91-005010-00 | 10-32 Hex Drive Flanged Insert | 8 |
| 10-008001-00 | Lockdown Bar Receiver Assy, Notched | Cabinet, Through | C-2 | 81-005125-20 | 1/4-20 x 1-1/4" Carriage Bolt, Black | 2 |
| | | | | 91-002025-00 | 1/4-20 flange Nut | 2 |
| | | | | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |
| 51-000066-10 | Lockdown Bar Switch Assy | 10-008001-00 Assy | C-47 | 91-000008-00 | 8-32 Nylon Stop Nut | 2 |
| 42-007003-## | Cabinet Side Rail (2) | Cabinet, Through | C-2 | 81-005108-16 | 8-32 x 1" Carriage Bolt, Black | 4 |
| | | | | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.443" OD, 0.06" TH | 2 |
| | | | | 91-001008-00 | 8-32 Keps Nut | 4 |
| 51-005001-01 | Power Box Assy, Front Outlet | Cabinet, Interior | C-2 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 8 |
| 17-006004-00 | Subwoofer Speaker, 8", 8Ω, 40W | Cabinet, Interior | C-2 | 80-002008-16 | 8-32 x 1" HWH Phillips MS, Serrated | 4 |
| | | | | 91-004008-00 | 8-32 T-Nut, 1/2" Diameter | 4 |
| | | | | 80-002008-06 | 8-32 x 3/8" HWH Phillips MS, Serrated | 1 |
| 05-008001-0# | Playfield Woodrails (2) | Playfield, Top | C-136 | 82-006006-20 | #6 x 1-1/4" PFH SMS | 12 |
| 12-000040-## | Playfield Flatrails (13) | Playfield, Top | C-136 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 22 |
| | | | | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.443" OD, 0.06" TH | 5 |
| | | | | 91-000008-00 | 8-32 Nylon Stop Nut | 5 |
| | | | | 82-007006-08 | #6 x 1/2" TH Phillips SMS | 9 |
| 12-000016-01 | Ball Outhole Flatrail, Extended | Playfield, Top | C-136 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 6 |

| Assembly | | | | Mounting Hardware | | |
|---------------|---|--------------------|---------|-------------------|---|-----|
| Part Number | Name | Mounts To | Drawing | Part Number | Description | Qty |
| 52-000077-00 | POTC Bottom Arch Assy | Playfield, Top | C-6 | 80-002008-08 | 8-32 x 1/2" HWH Phillips MS, Serrated | 2 |
| | | | | 10-000215-00 | Bottom Arch Hold Brkt | 2 |
| | | | | 80-002008-08 | 8-32 x 1/2" HWH Phillips MS, Serrated | 4 |
| 52-000080-00 | POTC RGB Beacon Flasher & Spotlight Assy | Playfield, Top | C-6 | 91-000008-00 | 8-32 Nylon Stop Nut | 2 |
| 51-000106-999 | Pop Bumper Top Assy, W/W/W (4) | Playfield, Top | C-6 | 82-006006-14 | #6 x 7/8" PFH SMS | 8 |
| 11-005004-01 | Pop Bumper Ring & Rod Assy (4) | Playfield, Through | C-6 | 91-000006-00 | 6-32 Nylon Stop Nut | 8 |
| 51-000091-00 | POTC Pirate Spinning Pop Bumper Assy | Pop Bumper Top | - | 82-000004-10 | #4 x 5/8" PPH SMS | 2 |
| 51-000091-10 | POTC Guns/Coins Spinning Pop Bumper Assy | Pop Bumper Top | - | 82-000004-10 | #4 x 5/8" PPH SMS | 2 |
| 52-000076-00 | POTC Mini PF Access Ramp Assy | Playfield, Top | C-6 | 82-006104-10 | #4 x 5/8" PFH SMS, Black | 2 |
| | | | | 91-000008-00 | 8-32 Nylon Stop Nut | 1 |
| 52-000075-00 | POTC Maelstrom Ramp Assy | Playfield, Top | C-6 | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.443" OD, 0.06" TH | 1 |
| | | | | 91-000008-00 | 8-32 Nylon Stop Nut | 1 |
| | | | | 82-006104-08 | #4 x 1/2" PFH SMS, Black | 1 |
| 52-000080-10 | POTC RGB Beacon Flasher & PF Plastic Assy | Playfield, Top | C-6 | 91-000008-00 | 8-32 Nylon Stop Nut | 2 |
| 51-000089-00 | Opto Spinner Assy, Lighted, Right | Playfield, Top | C-6 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |
| 51-005051-00 | POTC Left Turnaround Loop Diverter Assy | Playfield, Top | C-6 | 82-002008-16 | #8 x 1" HWH Phillips SMS | 2 |
| 52-000074-00 | POTC Treasure Chest 3-Ball Lock Assy | Playfield, Top | C-6 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 1 |
| | | | | 91-000008-00 | 8-32 Nylon Stop Nut | 1 |
| 52-000084-00 | POTC VUK Chute & Gate Assy | Playfield, Top | C-6 | 80-002008-08 | 8-32 x 1/2" HWH Phillips MS, Serrated | 3 |
| 52-000063-0# | POTC Back Panel Assy, LE/CE | Playfield, Top | C-6 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |
| | | | | 82-006006-20 | #6 x 1-1/4" PFH SMS | 5 |
| 52-000063-01 | POTC Back Panel Assy, Std | Playfield, Top | C-6 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |
| | | | | 82-006006-20 | #6 x 1-1/4" PFH SMS | 5 |
| 52-000073-01 | POTC Target Ship Sculpture Assy | Playfield, Top | C-6 | 91-000008-00 | 8-32 Nylon Stop Nut | 2 |
| | | | | 92-000008-00 | #8 Flat Washer, 0.19" ID, 0.443" OD, 0.06" TH | 2 |
| 51-000107-00 | Playfield Bubble Level Assy | Playfield, Top | C-6 | 82-007006-08 | #6 x 1/2" TH Phillips SMS | 2 |
| 52-000072-10 | POTC Cannon Load Flatrail & Gate Assy | BP Mini PF, Top | C-7 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 3 |
| | | | | 30-009000-13 | 1-3/16" Poly Post, Clear | 1 |
| | | | | 97-000008-03 | 8-32/WS Ramp Fastener Post, 2-3/8" | 1 |
| 52-000072-00 | POTC Cannon Load Latch Coil Assy | BP Mini PF, Top | C-7 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |
| 51-000089-01 | Opto Spinner Assy, Lighted, Left | BP Mini PF, Top | C-7 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |
| 51-000089-00 | Opto Spinner Assy, Lighted, Right | BP Mini PF, Top | C-7 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |

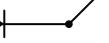
| Assembly | | | | Mounting Hardware | | |
|---------------|--|-------------------|---------|-------------------|--|-----|
| Part Number | Name | Mounts To | Drawing | Part Number | Description | Qty |
| 52-000132-00 | Left Flipper Assy, FL-15411 (2) | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 16 |
| 52-000131-00 | Right Flipper Assy, FL-15411 | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 8 |
| 51-000021-00 | 5-Ball Trough Assy | Playfield, Under | C-8 | 80-002008-12 | 8-32 x 3/4" HWH Phillips MS, Serrated | 4 |
| | | | | 80-002008-16 | 8-32 x 1" HWH Phillips MS, Serrated | 2 |
| | | | | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |
| 51-000026-00 | Auto-Launch Assy Ball | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |
| 51-000003-00 | Slingshot Assy, 23-800 (3) | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 21 |
| 52-000071-10 | POTC Single Disc Spinning Map Assy | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 8 |
| 51-000083-01 | Ball Scoop Assy, Right Side Entrance | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 3 |
| 51-000004-01 | Pop Bumper Bottom Assy, 26-1200 (4) | Playfield, Under | C-8 | 91-000006-00 | 6-32 Nylon Stop Nut | 12 |
| | | | | 85-008006-20 | 6-32 x 1-1/4" Screw Nail, Fin Shank, Black | 12 |
| | | | | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 12 |
| 51-000009-00 | Vertical Up-Kicker Assy | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |
| 18-007003-00 | Rollover Button Switch Assy | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 3 |
| 52-000078-00 | POTC Plastic Primary Subway Assy | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 13 |
| 52-000078-10 | POTC Steel Subway Assy | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 7 |
| 51-000030-10 | Disappearing Post Assy, 7/16" Diam (2) | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 8 |
| 51-000088-00 | Fork Lifter Assy | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 5 |
| 51-000024-01 | Playfield Magnet Assy, Fixed Core | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 3 |
| 52-000073-00 | POTC Target Ship Assy | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |
| 52-000068-00 | POTC Black Pearl PF Rocker Assy | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 2 |
| 51-000024-00 | Playfield Magnet Assy, Adjustable Core | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 3 |
| 31-000011-00 | POTC Plastic VUK Subway | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 3 |
| 51-000012-00 | VUK/Steel Trough Assy, Right Mount | Playfield, Under | C-8 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |
| 52-000102-32R | Left Flipper Assy, Mod -LR, FL-11722, 3-Way, LR | BP Mini PF, Under | C-9 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 8 |
| 52-000101-33L | Right Flipper Assy, Mod -LL, FL-11722, 3-Way, LL | BP Mini PF, Under | C-9 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 8 |
| 52-000069-00 | POTC Black Pearl PF Cannon Assy | BP Mini PF, Under | C-9 | 82-002008-08 | #8 x 1/2" HWH Phillips SMS | 4 |

Assembly Cables

| Assembly | | Cable | |
|--------------|---------------------------------------|--------------|--|
| Part Number | Name | Part Number | Description |
| 51-005056-00 | Backbox Mount PCB Base Assy | 19-003100-01 | USB Cable, 2.0 A to Mini-B, M-M, Shielded, 1ft |
| | | 19-100002-00 | ATX Power Cable, 0.093" to C13 |
| | | 19-100003-00 | Molex Power Splitter Cable, Male to 2 x 5.25in Female, 8in |
| 51-005032-10 | 27" LCD Monitor Assy, Backbox PCBs | 19-003059-10 | USB Extension Cable, 3.0 A to A, M-F, 10ft |
| | | 19-003127-03 | Adapter Cable, DVI-D to HDMI, w/Ferrites, 3ft |
| 15-004002-01 | Sound Amplifier PCB Assy, Analog In | 19-003072-03 | 27" LCD Power Cable, Backbox PCBs, 10/17 |
| | | 19-009015-02 | Sound Amp Bd Input Power Cable |
| 51-005053-00 | Backbox Speaker Bar Assy, Wood | 19-003043-01 | 3.5mm Audio Cable, M-M, 3ft |
| | | 19-003116-00 | Speaker Bar Cable, Right |
| 51-005042-00 | Backbox LED Strip Assy, w/Cable | 19-003116-01 | Speaker Bar Cable, Left |
| 51-006010-00 | Backbox Topper Mtg Brkt & Cable Assy | 19-003109-10 | Backbox Light Cable, 10/17 |
| 51-005052-00 | POTC Ship In A Bottle Topper Assy | 19-003123-02 | Backbox Topper LED Strip Cable (LE only) |
| 51-000032-01 | Knocker Assy, Vertical | 19-003126-82 | Universal Topper Cable, LT BLU-VIO & LT BLU-BRN, 24" (CE only) |
| 51-005023-00 | Line Filter Box Assy | 19-003104-01 | Backbox Knocker Coil Cable, Backbox PCBs |
| 51-005001-01 | Power Box Assy, Front Outlet | 19-009000-00 | Line Power Cable, USA |
| | | 19-009028-01 | Power Box AC Input Cable, Backbox PCBs |
| | | 19-003052-00 | Power Box Jumper Cable, 18AWG, BLK |
| | | 19-003053-00 | Power Box Jumper Cable, 18AWG, WHT |
| 17-006004-00 | Subwoofer Speaker, 8", 8Ω, 40W | 19-003116-12 | Cabinet Speaker Cable |
| 51-000064-00 | Cabinet Headphone Jack Assy | 19-003115-00 | Cabinet Headphone Bd Harness |
| | | 19-003115-01 | Cabinet Headphone Bd Switch Harness |
| 51-000066-10 | Lockdown Bar Switch Assy, 11/17 | 19-003107-10 | Lockdown Bar Switch Cable |
| 51-006000-00 | Cabinet Flipper Switches & Cable Assy | 19-005009-10 | Universal Lower Cabinet Harness |
| 16-005000-02 | Main Transformer, 2/16 | 19-009027-01 | Transformer Secondary Cable, Backbox PCBs |

| Assembly | | Cable | |
|--------------|--|---------------|---|
| Part Number | Name | Part Number | Description |
| - | Main Playfield | 19-009035-00 | POTC Main PF Coil Harness |
| - | Black Pearl Mini Playfield | 19-009036-00 | POTC Matrixed/Dedicated Switch Harness |
| Various | RGB LED Boards | 19-009036-06 | POTC Buried Magnet Area Target Switch Cable |
| Various | GI & Flasher LED Boards | 19-009037-00 | POTC Main PF 5/12V Power Harness |
| Various | Opto Switches | 19-009035-50 | POTC Black Pearl Mini PF Coil/Switch Harness |
| 15-005002-00 | Opto I/O Board Set Assy | Various | See RGB LED Wiring, pg C-94 |
| 51-000009-00 | Vertical Up-Kicker Assy | Various | See GI Lighting Wiring, pg C-100 |
| 51-000012-00 | VUK/Steel Trough Assy, Right Mount | Various | See Opto Wiring, pg C-102 |
| 51-000021-00 | 5-Ball Trough Assy | 19-003091-00 | Opto I/O Bd Switch Cable |
| 51-000083-01 | Ball Scoop Assy, Right Side Entrance | 19-009035-09 | POTC Tortuga VUK Coil Cable |
| 51-000088-00 | Fork Lifter Assy | 19-009035-07 | POTC Black Pearl Access VUK Coil Cable |
| 51-000091-00 | POTC Pirate Spinning Pop Bumper Assy | 19-009019-00 | 5-Ball Trough Opto Bds Input Power Cable |
| 51-000091-10 | POTC Guns/Coins Spinning Pop Bumper Assy | 19-003090-00 | 5-Ball Trough Opto Switch Cable |
| 51-005051-00 | POTC Left Turnaround Loop Diverter Assy | 19-009035-08 | POTC The Depths Scoop Coil Cable |
| 52-000071-10 | POTC Single Disc Spinning Map Assy | 19-009035-06 | POTC Fork Lifter Assy Coil & Switch Cable |
| 52-000074-00 | POTC Treasure Chest 3-Ball Lock Assy | 19-100001-00 | POTC Lower Middle Pop Bumper Motor Cable |
| 52-000075-00 | POTC Maelstrom Ramp Assy | 19-100000-00 | POTC Upper Pop Bumper Motor Cable |
| 52-000076-00 | POTC Mini PF Access Ramp Assy | 19-009035-04 | POTC Left Turnaround Loop Diverter Coil Cable |
| 52-000077-00 | POTC Bottom Arch Assy | 19-009035-05 | POTC Spinning Map Single Motor Cable |
| | | 19-009035-03 | POTC Treasure Chest Diverter Coil Cable |
| | | 19-009035-02 | POTC Maelstrom Ramp Diverter Coil Cable |
| | | 19-009036-02 | POTC Maelstrom Ramp Made Switch Cable |
| | | 19-009038-12 | POTC Ramp Light Strip RGB LED Cable |
| | | 19-003122-00 | 4.3" LCD Power Cable |
| | | 19-003025-10L | VGA 15-pin Sub D Cable, Low Profile, 10ft |

Matrixed Switch Wiring Table

WHT  GRN or GRY

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 | Column 7 | Column 8 | Column 9 | Column 10 | Column 11 | Column 12 | Column 13 | Column 14 | Column 15 | Column 16 | | | | | | | | | | | | | | |
|-----------------|-------------------------------------|----------|--------------------------------------|-------------------------------|---------------------------|----------------------------|------------------------|--------------------------|-----------------------------|-----------------------------|--------------------------------|--|------------------------------------|------------------------------------|-----------------------------------|--------------------------------|-----|----------------------------------|----------------------------------|-----|-------------------------------|-----------------------------------|-----|-----|-----------------------------------|-----|-----|-----|-----|-----|
| | J201-1 | J201-2 | J201-3 | J201-4 | J201-5 | J201-6 | J201-7 | J201-9 | J202-1 | J202-2 | J202-3 | J202-4 | J202-5 | J202-6 | J202-8 | J202-9 | | | | | | | | | | | | | | |
| | GRN | BLK | GRN | BRN | GRN | RED | GRN | ORN | GRN | YEL | GRN | GRY | GRN | VIO | GRY | BLK | GRY | BRN | GRY | RED | GRY | ORN | GRY | YEL | GRY | GRN | GRY | BLU | GRY | VIO |
| Row 1 J200-1 | 1 5-Ball Trough #5 (left) | | 9 Black Pearl BONUS X Target | 17 Pop Bumper Area Rubber | | 25 2X Target | 33 Upper Pop Bumper | | 41 Left Slingshot, Low | 49 Right Slingshot, Low | | 57 Chapter Select Right Rubber | 65 Black Pearl Access VUK | | 73 3-Ball Chest Lock #1 (left) | 81 MAP Subway Enter | | 89 | 97 MAP Subway Enter | | 105 | 113 MAP Subway Enter | | 121 | | | | | | |
| Row 2 J200-2 | 2 5-Ball Trough #4 | | 10 Black Pearl BONUS X Target | 18 Lower Middle Pop Bumper | | 26 4X Target | 34 Bumper Rollover | | 42 Left Slingshot, High | 50 Right Slingshot, High | | 58 Chapter Select Target #5 (right) | 66 Black Pearl Cannon Loaded | | 74 3-Ball Chest Lock #2 | 82 Bayou Subway Enter | | 90 | 98 Bayou Subway Enter | | 106 | 114 Bayou Subway Enter | | 122 | | | | | | |
| Row 3 J200-3 | 3 5-Ball Trough #3 | | 11 Upper Middle Pop Bumper | | 27 6X Target | 35 GOLD Target | | 43 PIRATE Return Lane | 51 PIRATE Return Lane | | 59 Chapter Select Target #4 | 67 Black Pearl Left Spinner | | 75 3-Ball Chest Lock #3 (right) | 83 Maelstrom Subway Enter | | 91 | 99 Maelstrom Subway Enter | | 107 | 115 Maelstrom Subway Enter | | 123 | | | | | | | |
| Row 4 J200-4 | 4 5-Ball Trough #2 | | 12 Black Pearl LOAD CANNON Target | 20 5X Target | | 28 PIRATE Target | 36 GOLD Target | | 44 PIRATE Outlane | 52 PIRATE Return Lane | | 60 Chapter Select Target #3 | 68 Black Pearl Right Spinner | | 76 Treasure Chest Lane | 84 The Depths Scoop | | 92 | 100 The Depths Scoop | | 108 | 116 The Depths Scoop | | 124 | | | | | | |
| Row 5 J200-5 | 5 5-Ball Trough #1 (right) | | 13 Black Pearl SPOT GOLD Target | 21 Upper Slingshot, Low | | 29 LOAD CHEST Target | 37 GOLD Target | | 45 PIRATE Return Lane | 53 PIRATE Outlane | | 61 Chapter Select Target #2 | 69 Black Pearl Motor Outer Opto | | 77 Left Orbit Enter | 85 Tortuga VUK | | 93 | 101 Tortuga VUK | | 109 | 117 Tortuga VUK | | 125 | | | | | | |
| Row 6 J200-6 | 6 5-Ball Trough Jam | | 14 Black Pearl SPOT GOLD Target | 22 Upper Slingshot, High | | 30 Left Turnaround Made | 38 GOLD Target | | 46 Spot Character Target | 54 Lower Pop Bumper | | 62 Chapter Select Target #1 (left) | 70 Black Pearl Motor Inner Opto | | 78 Right Orbit Made | 86 Devil's Triangle Spinner | | 94 | 102 Devil's Triangle Spinner | | 110 | 118 Devil's Triangle Spinner | | 126 | | | | | | |
| Row 7 J200-7 | 7 Black Pearl LOAD CANNON Target | | 23 MAP Target | | 31 3X Target | | 39 Forks Up | | 47 3-Ball Lock | 55 Shooter Lane | | 63 Chapter Select Left Rubber | 71 Right Orbit Enter | | 79 Target Ship Bullseye | 87 Maelstrom Ramp Enter | | 95 | 103 Maelstrom Ramp Enter | | 111 | 119 Maelstrom Ramp Enter | | 127 | | | | | | |
| Row 8 J200-8 | 8 MAP Target | | 16 MAP Target | | 24 Maelstrom Ramp Made | | 32 Target Ship Hit | | 40 MAP Target | 48 Target Ship Hit | | 56 Inner Loop Target | 64 LOAD CHEST Target | | 72 Inner Loop Enter | 80 Left Orbit Made | | 88 Black Pearl Acc. Ramp Made | 96 Black Pearl Acc. Ramp Made | | 104 | 112 Black Pearl Acc. Ramp Made | | 120 | 128 Black Pearl Acc. Ramp Made | | 128 | | | |
| | WHT | | VIO | | | | | | | | | | | | | | | | | | | | | | | | | | | |

 Opto Switches

Dedicated Switch Wiring Table

| | Return 1 | Return 2 | Return 3 | Return 4 | Return 5 | Return 6 | Return 7 | Return 8 |
|--------|--------------------------|---------------------------|--------------------------------|--------------------------------------|---------------------------------------|----------|----------|----------|
| | J601-7 | J601-6 | J601-5 | J601-4 | J601-2 | J601-3 | J601-8 | J601-9 |
| Common | BLK | GRY | BLK | BRN | BLK | RED | BLK | ORN |
| J601-1 | 1 Left Flipper EOS | 2 Right Flipper EOS | 3 Upper Left Flipper EOS | 4 Black Pearl Left Flipper EOS | 5 Black Pearl Right Flipper EOS | 6 | 7 | 8 |
| BLK | | | | | | | | |

| | Return 9 | Return 10 | Return 11 | Return 12 | Return 13 | Return 14 | Return 15 | Return 16 |
|--------|------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|----------------------------|----------------------------|------------------------------|---------------------------------------|
| | J602-7 | J602-6 | J602-5 | J602-4 | J602-2 | J602-3 | J602-8 | J602-10 |
| Common | YEL | BLK | YEL | BRN | YEL | RED | YEL | ORN |
| J602-1 | 9 Left Flipper Switch, Lower | 10 Left Flipper Switch, Upper | 11 Right Flipper Switch, Lower | 12 Right Flipper Switch, Upper | 13 Enter/Menu Button | 14 Up/Volume+ Button | 15 Down/Volume- Button | 16 Escape/Service Credit Button |
| BLK | | | | | | | | |

| | Return 17 | Return 18 | Return 19 | Return 20 | Return 21 | Return 22 | Return 23 | Return 24 |
|--------|---------------------------|----------------------------|--------------------------------------|-------------------------------|-------------------------------|------------------------------------|-----------|-----------|
| | J603-7 | J603-6 | J603-5 | J603-4 | J603-2 | J603-3 | J603-9 | J603-10 |
| Common | BLU | BLK | BLU | BRN | BLU | RED | BLU | ORN |
| J603-1 | 17 Left Coin Switch | 18 Right Coin Switch | 19 Center Dollar Bill Acceptor | 20 4th Coin Slot Switch | 21 5th Coin Slot Switch | 22 Ticket Motor Notch Switch | 23 | 24 |
| BLK | | | | | | | | |

| | Return 25 | Return 26 | Return 27 | Return 28 | Return 29 | Return 30 | Return 31 | Return 32 |
|--------|-----------------------|-------------------------|-------------------------|-----------|------------------------|--------------------------------------|------------------------------------|-------------------------------------|
| | J604-8 | J604-6 | J604-5 | J604-4 | J604-2 | J604-3 | J604-9 | J604-10 |
| Common | VIO | BLK | VIO | BRN | VIO | RED | VIO | ORN |
| J604-1 | 25 Start Button | 26 Coin Door Open | 27 Plumb Bob Tilt | 28 | 29 Action Button | 30 Headphone Panel Volume Down | 31 Headphone Panel Volume Up | 32 Headphone Panel Jack Sense |
| BLK | | | | | | | | |

70-Volt Coil Wiring Table

| F701, 10A SB | Drive 1 | | Drive 2 | | Drive 3 | | Drive 4 | | Drive 5 | | Drive 6 | | Drive 7 | | Drive 8 | |
|---------------|---------------------|-----|-------------------------|-----|-------------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|
| F704, 5A SB | J104-9, Q308 | | J104-8, Q307 | | J104-7, Q306 | | J104-6, Q305 | | J104-5, Q304 | | J104-4, Q303 | | J104-3, Q302 | | J104-2, Q301 | |
| 70V Power | BRN | BLK | BRN | GRY | BRN | RED | BRN | ORN | BRN | YEL | BRN | GRN | BRN | BLU | BRN | VIO |
| J104-1 | Lower Pop Bumper | | Lower Middle Pop Bumper | | Upper Middle Pop Bumper | | Upper Pop Bumper | | Tortuga VUK | | Upper Slingshot | | Knocker | | | |
| BRN | Pop Bumper | | Pop Bumper | | Pop Bumper | | Pop Bumper | | VUK | | Slingshot | | Knocker | | | |

| F701, 10A SB | Drive 9 | | Drive 10 | | Drive 11 | | Drive 12 | | Drive 13 | | Drive 14 | | Drive 15 | | Drive 16 | |
|---------------|----------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|
| F705, 7A SB | J105-10, Q318 | | J105-8, Q317 | | J105-7, Q316 | | J105-6, Q315 | | J105-5, Q314 | | J105-4, Q313 | | J105-3, Q312 | | J105-2, Q311 | |
| 70V Power | RED | BLK | RED | BRN | RED | GRY | RED | ORN | RED | YEL | RED | GRN | RED | BLU | RED | VIO |
| J105-1 | Left | | Left | | Right | | Right | | 5-Ball | | Auto-Launch | | Right Slingshot | | | |
| RED | Flipper Power | | Flipper Hold | | Flipper Power | | Flipper Hold | | Trough VUK | | | | | | | |

| | | | | | | | | | | | | | | | | |
|---------------|----------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|---------------------|-----|
| F701, 10A SB | Drive 17 | | Drive 18 | | Drive 19 | | Drive 20 | | Drive 21 | | Drive 22 | | Drive 23 | | Drive 24 | |
| F706, 6.3A SB | J106-10, Q328 | | J106-9, Q327 | | J106-7, Q326 | | J106-6, Q325 | | J106-5, Q324 | | J106-4, Q323 | | J106-3, Q322 | | J106-2, Q321 | |
| 70V Power | ORN | BLK | ORN | BRN | ORN | RED | ORN | GRY | ORN | YEL | ORN | GRN | ORN | BLU | ORN | VIO |
| J106-1 | 3-Ball Lock | | 3-Ball Lock | | Chapter Select | | Orbit Magnet | | Black Pearl | | | | | | | |
| ORN | Forks Raise | | Forks Retract | | Buried Magnet | | Access VUK | | | | | | | | | |

20-Volt Coil Wiring Table

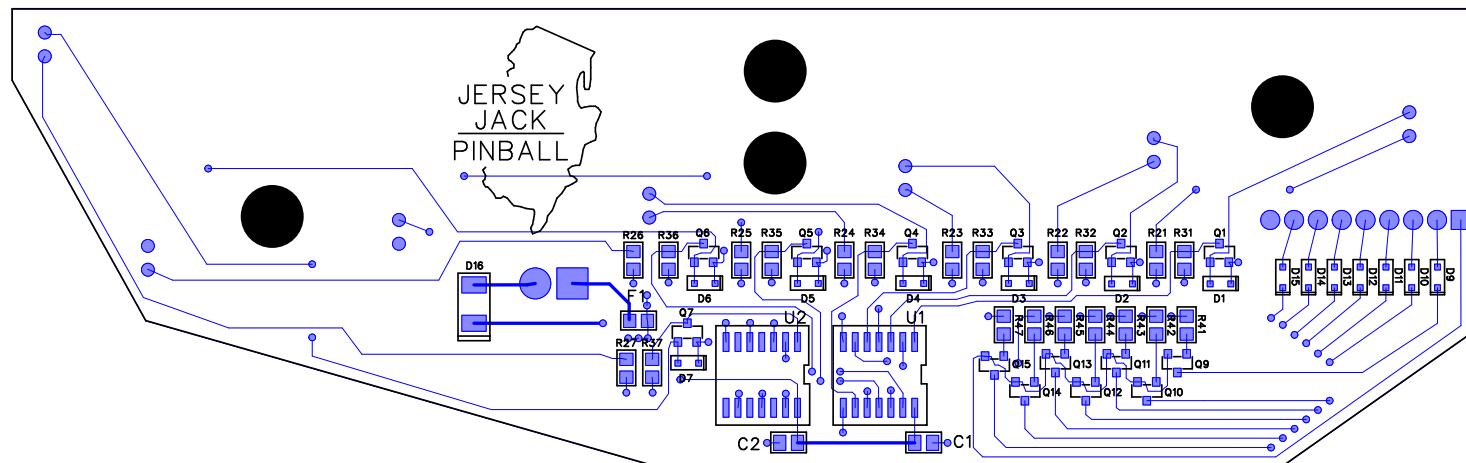
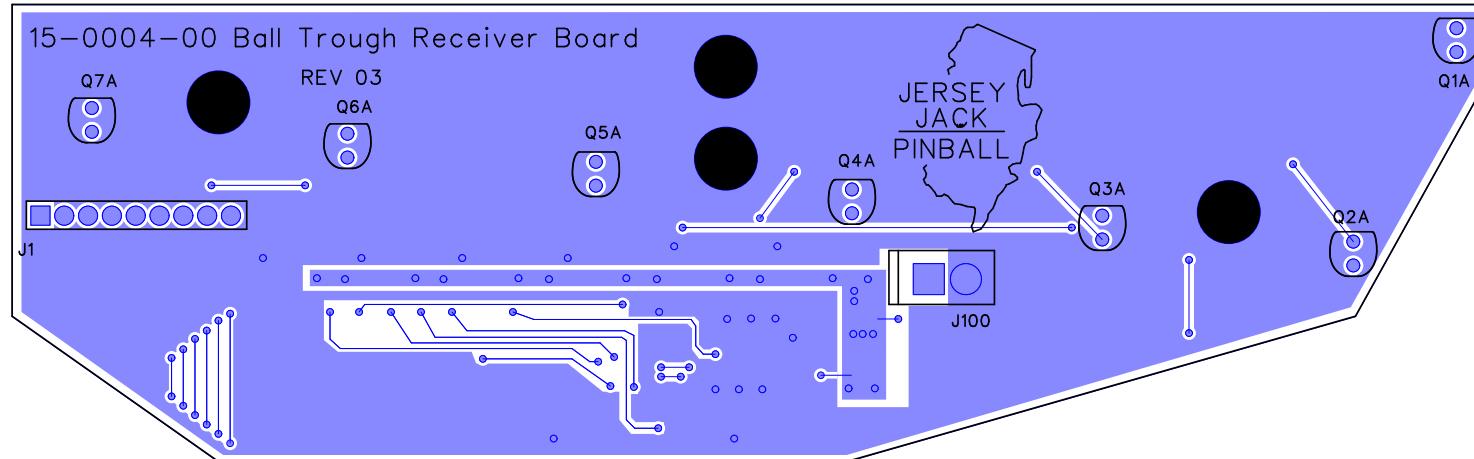
12-Volt Motor & Light Wiring Table



Section D

Reference Diagrams & Schematics

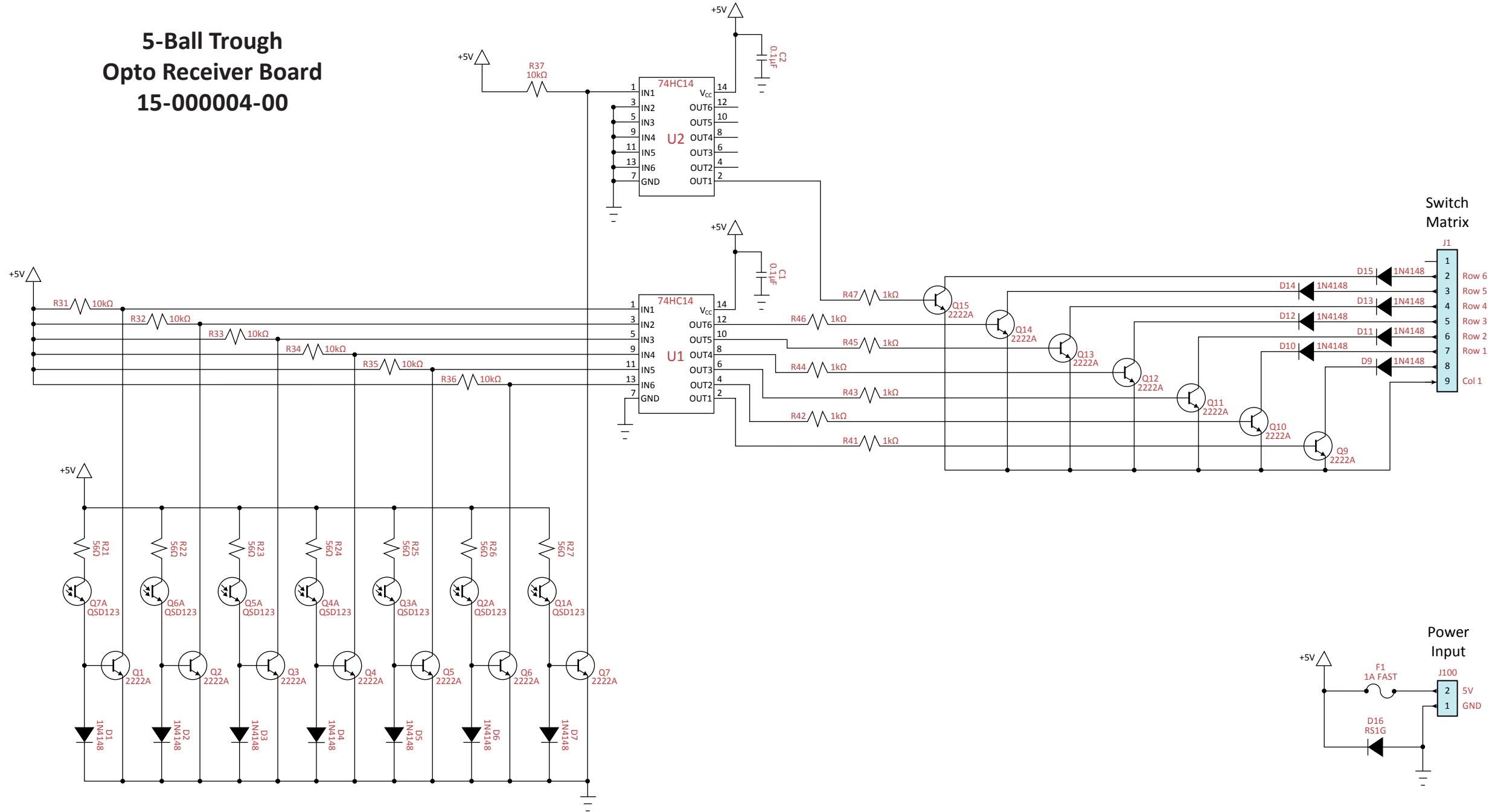


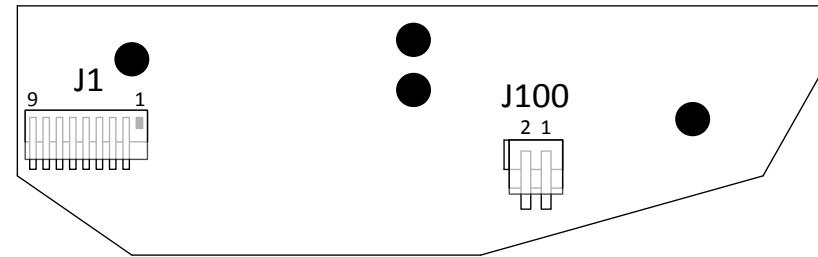


5-Ball Trough Opto Receiver Board
15-000004-00

| Component(s) | Part Number | Description |
|---------------|--------------|---|
| C1, C2 | 100-104K-050 | Capacitor, MLCC, 0805 SMT, 0.1µF, 50V, 10% |
| D1-D7, D9-D15 | 110-1000-0S | Diode, 1N4148, SMT, 75V, 300mA |
| D16 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F1 | 170-3201-FS | Fuse, Fast, 0805 SMT, 1A, 32V |
| Q1-Q7, Q9-Q15 | 131-0000-0S | Transistor, 2222A, SOT-23 SMT, NPN |
| Q1A-Q7A | 24-0003-0T | Phototransistor, IR, QSD123, 880nm, 5mm |
| R21-R27 | 120-0056-254 | Resistor, 0805 SMT, 56Ω, 0.25W, 5% |
| R31-R37 | 120-10K0-254 | Resistor, 0805 SMT, 10kΩ, 0.25W, 5% |
| R41-R47 | 120-1K00-254 | Resistor, 0805 SMT, 1kΩ, 0.25W, 5% |
| U1, U2 | 141-0000-0S | Hex Inverters, Schmitt Trigger, 74HC14, SOT-108 SMT |
| J100 | 31-2500-02 | Header, Male, 2-pin, Rt Angle, 3.96mm |
| J1 | 31-2501-09 | Header, Male, 9-pin, Rt Angle, 2.54mm |

**5-Ball Trough
Opto Receiver Board**
15-000004-00





5-Ball Trough Opto Receiver Board

15-000004-00

Connector Pin-outs

J1 Matrixed Switches

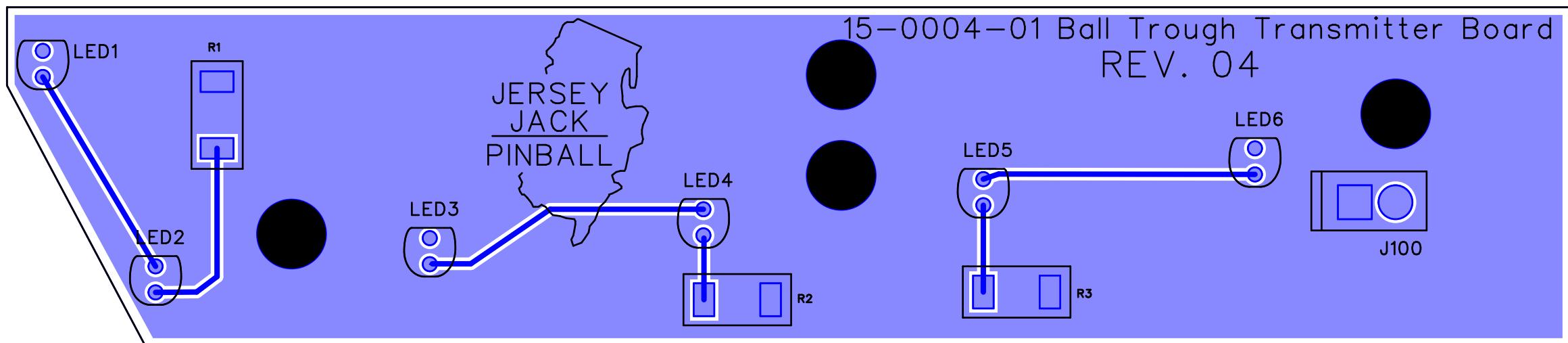
| | | |
|------|----------|--|
| J1-1 | GRN-BLK | Matrixed switches, Column 1 from I/O Board, J201-1 |
| J1-2 | Not Used | |
| J1-3 | WHT-BLK | Matrixed switches, Row 1 from I/O Board, J200-1 |
| J1-4 | WHT-BRN | Matrixed switches, Row 2 from I/O Board J200-2 |
| J1-5 | WHT-RED | Matrixed switches, Row 3 from I/O Board J200-3 |
| J1-6 | WHT-ORN | Matrixed switches, Row 4 from I/O Board J200-4 |
| J1-7 | WHT-YEL | Matrixed switches, Row 5 from I/O Board J200-5 |
| J1-8 | WHT-GRN | Matrixed switches, Row 6 from I/O Board J200-6 |
| J1-9 | Key | |

J100 Power Input

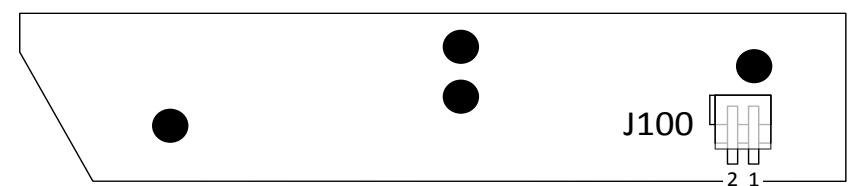
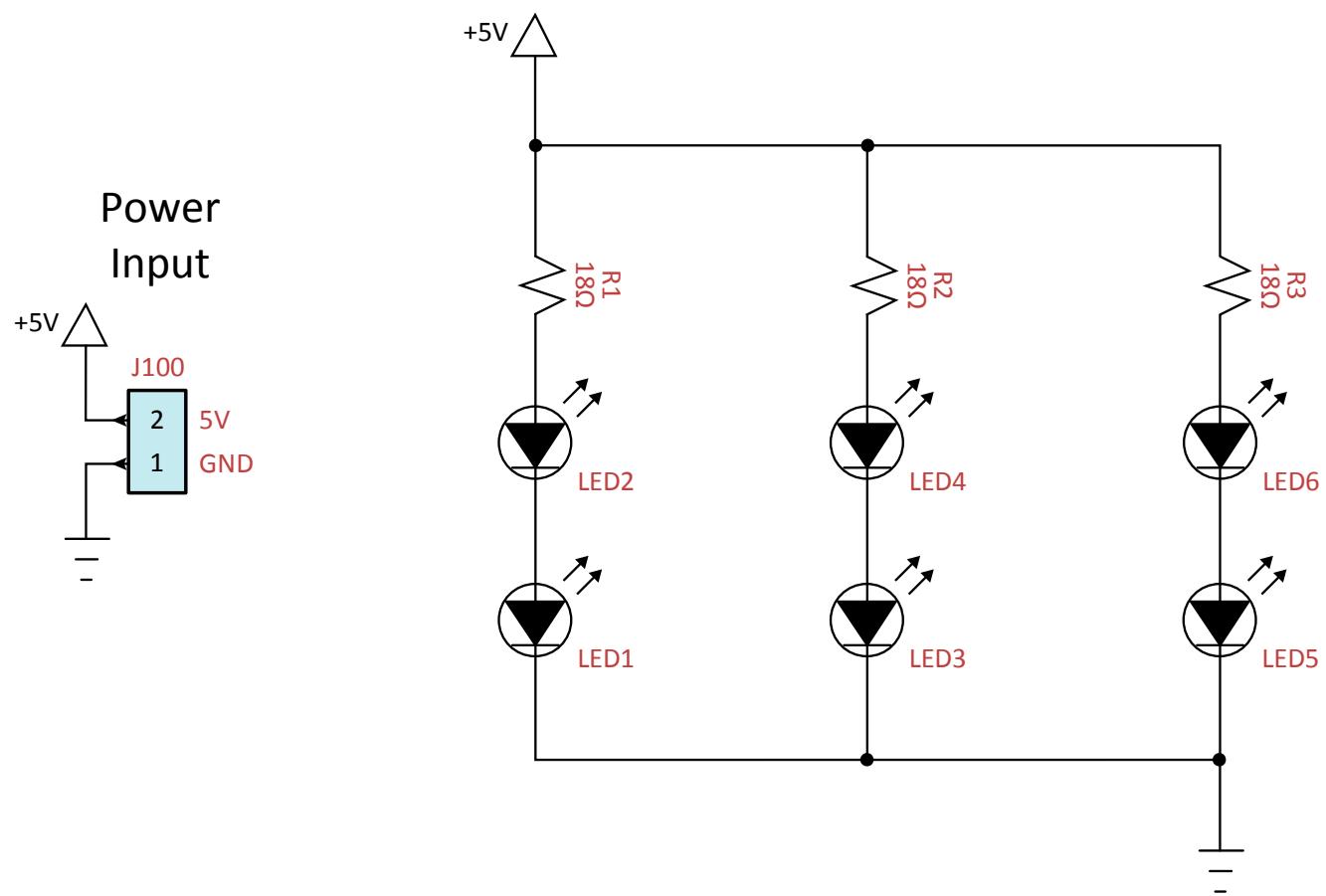
| | | |
|--------|-----|----------------------------|
| J100-1 | RED | +5VDC from ATX Pwr Supply |
| J100-2 | BLK | Ground from ATX Pwr Supply |

5-Ball Trough Opto Transmitter Board
15-000004-01

| Component(s) | Part Number | Description |
|--------------|--------------|---------------------------------------|
| LED1-LED6 | 24-0002-0T | LED, IR Emitting, QED123, 880nm, 5mm |
| R1-R3 | 123-0018-1H4 | Resistor, 2512 SMT, 18Ω, 1W, 5% |
| J100 | 31-2500-02 | Header, Male, 2-pin, Rt Angle, 3.96mm |



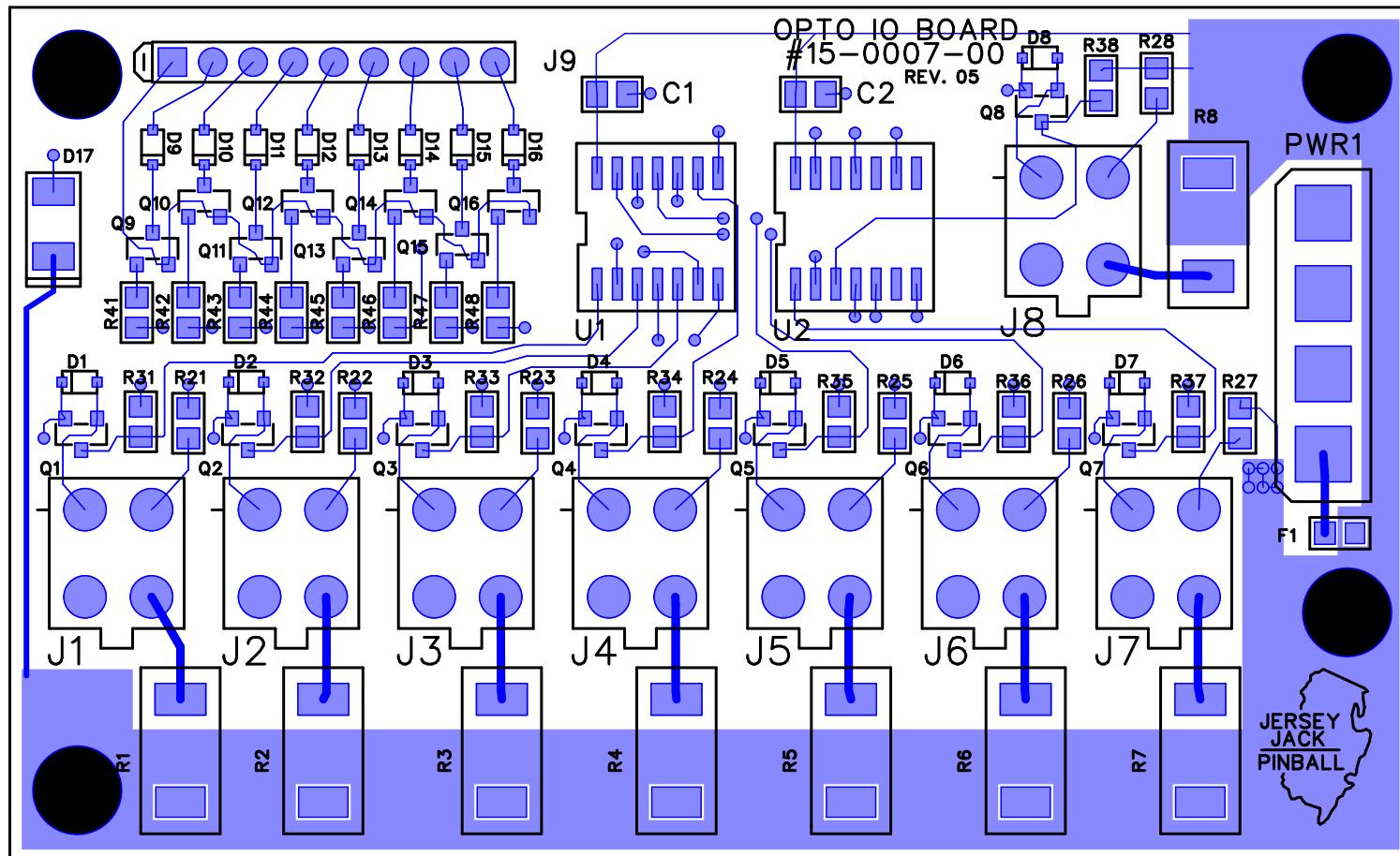
**5-Ball Trough
Opto Transmitter Board
15-000004-01**



**5-Ball Trough Opto Transmitter Board
15-000004-01
Connector Pin-outs, Revision 4**

J100 Power Input

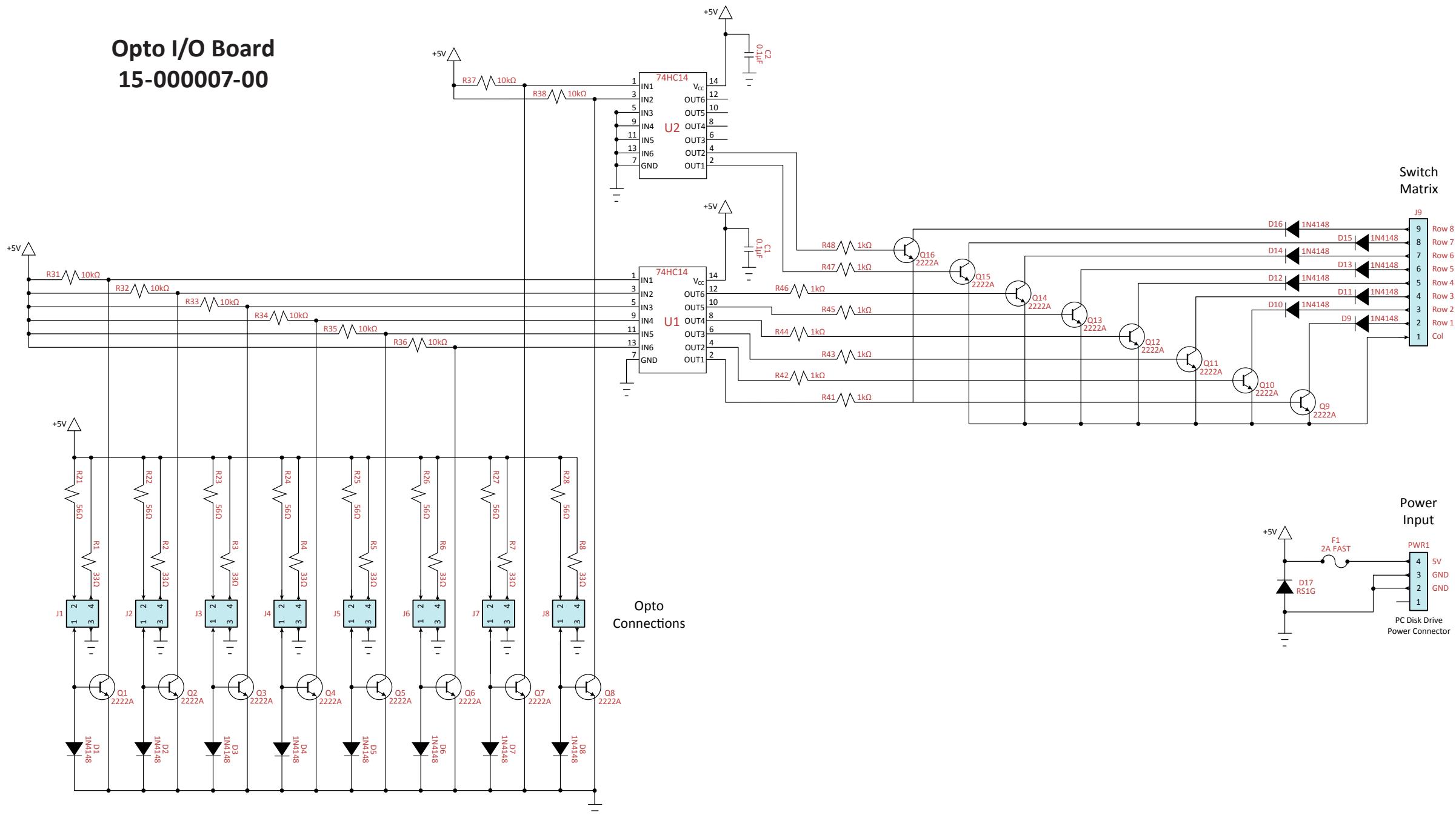
| | | |
|--------|-----|----------------------------|
| J100-1 | RED | +5VDC from ATX Pwr Supply |
| J100-2 | BLK | Ground from ATX Pwr Supply |

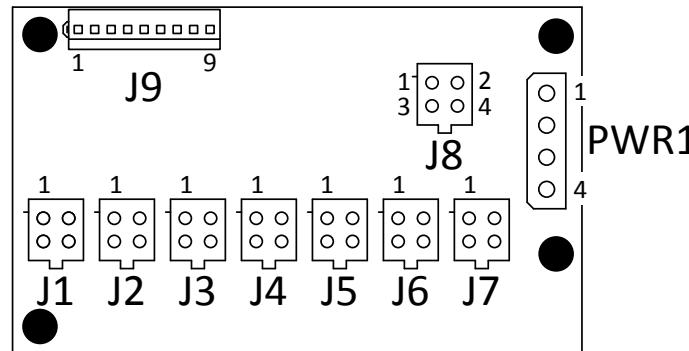


**Opto I/O Board
15-000007-00**

| Component(s) | Part Number | Description |
|--------------|--------------|---|
| C1, C2 | 100-104K-050 | Capacitor, MLCC, 0805 SMT, 0.1µF, 50V, 10% |
| D1-D16 | 110-1000-0S | Diode, 1N4148, SMT, 75V, 300mA |
| D17 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F1 | 170-3202-FS | Fuse, Fast, 0805 SMT, 2A, 32V |
| Q1-Q16 | 131-0000-0S | Transistor, 2222A, SOT-23 SMT, NPN |
| R1-R8 | 123-0033-2HX | Resistor, 2512 SMT, 33Ω, 2W, 5% |
| R21-R28 | 120-0056-254 | Resistor, 0805 SMT, 56Ω, 0.25W, 5% |
| R31-R38 | 120-10K0-334 | Resistor, 0805 SMT, 10kΩ, 0.33W, 5% |
| R41-R48 | 120-1K00-334 | Resistor, 0805 SMT, 1kΩ, 0.33W, 5% |
| U1, U2 | 141-0000-0S | Hex Inverters, Schmitt Trigger, 74HC14, SOT-108 SMT |
| PWR1 | 31-2502-04 | Connector Header, Male, 4-pin, Power |
| J1-J8 | 31-2503-04 | Connector Header, Male, 4-pin, 2 Rows, 4.2mm |
| J9 | 31-2504-09 | Header, Male, 9-pin, 2.54mm |

Opto I/O Board 15-000007-00





Upper Right Opto I/O Board, 15-000007-00
Connector Pin-outs

J1 Matrixed Sw 65 [Black Pearl Access VUK Opto Pair]

| | | |
|------|-----|---|
| J1-1 | GRN | RX of Black Pearl Access VUK opto pair ("E" lead) |
| J1-2 | WHT | RX of Black Pearl Access VUK opto pair ("C" lead) |
| J1-3 | BLK | TX of Black Pearl Access VUK opto pair ("K" lead) |
| J1-4 | RED | TX of Black Pearl Access VUK opto pair ("A" lead) |

J2 Matrixed Sw 66 [Black Pearl Cannon Loaded Opto Pair]

| | | |
|------|-----|--|
| J2-1 | GRN | RX of Black Pearl Cannon Loaded opto pair ("E" lead) |
| J2-2 | WHT | RX of Black Pearl Cannon Loaded opto pair ("C" lead) |
| J2-3 | BLK | TX of Black Pearl Cannon Loaded opto pair ("K" lead) |
| J2-4 | RED | TX of Black Pearl Cannon Loaded opto pair ("A" lead) |

J3 Matrixed Sw 67 [Black Pearl Left Spinner U-shaped Opto]

| | | |
|------|-----|--|
| J3-1 | GRN | RX of Black Pearl Left Spinner U-shaped opto |
| J3-2 | WHT | RX of Black Pearl Left Spinner U-shaped opto |
| J3-3 | BLK | TX of Black Pearl Left Spinner U-shaped opto |
| J3-4 | RED | TX of Black Pearl Left Spinner U-shaped opto |

J4 Matrixed Sw 68 [Black Pearl Right Spinner U-shaped Opto]

| | | |
|------|-----|---|
| J4-1 | GRN | RX of Black Pearl Right Spinner U-shaped opto |
| J4-2 | WHT | RX of Black Pearl Right Spinner U-shaped opto |
| J4-3 | BLK | TX of Black Pearl Right Spinner U-shaped opto |
| J4-4 | RED | TX of Black Pearl Right Spinner U-shaped opto |

J5 Matrixed Sw 69 [Black Pearl Motor Outer U-shaped Opto]

| | | |
|------|-----|---|
| J5-1 | GRN | RX of Black Pearl Motor Outer U-shaped opto |
| J5-2 | WHT | RX of Black Pearl Motor Outer U-shaped opto |
| J5-3 | BLK | TX of Black Pearl Motor Outer U-shaped opto |
| J5-4 | RED | TX of Black Pearl Motor Outer U-shaped opto |

J6 Matrixed Sw 70 [Black Pearl Motor Inner U-shaped Opto]

| | | |
|------|-----|---|
| J6-1 | GRN | RX of Black Pearl Motor Inner U-shaped opto |
| J6-2 | WHT | RX of Black Pearl Motor Inner U-shaped opto |
| J6-3 | BLK | TX of Black Pearl Motor Inner U-shaped opto |
| J6-4 | RED | TX of Black Pearl Motor Inner U-shaped opto |

J7 Matrixed Sw 71 [Right Orbit Enter Opto Pair]

| | | |
|------|-----|--|
| J7-1 | GRN | RX of Right Orbit Enter opto pair ("E" lead) |
| J7-2 | WHT | RX of Right Orbit Enter opto pair ("C" lead) |
| J7-3 | BLK | TX of Right Orbit Enter opto pair ("K" lead) |
| J7-4 | RED | TX of Right Orbit Enter opto pair ("A" lead) |

J8 Matrixed Sw 72 [Inner Loop Enter Opto Pair]

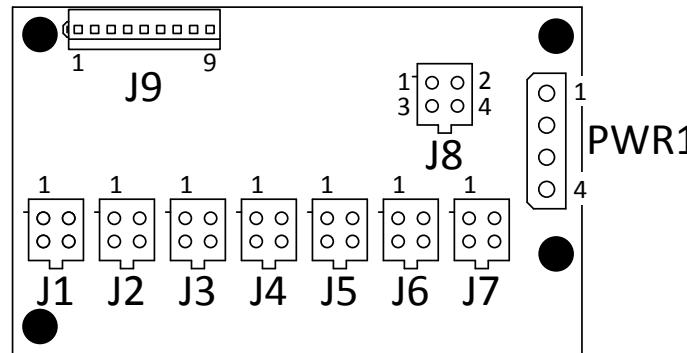
| | | |
|------|-----|---|
| J8-1 | GRN | RX of Inner Loop Enter opto pair ("E" lead) |
| J8-2 | WHT | RX of Inner Loop Enter opto pair ("C" lead) |
| J8-3 | BLK | TX of Inner Loop Enter opto pair ("K" lead) |
| J8-4 | RED | TX of Inner Loop Enter opto pair ("A" lead) |

J9 Matrixed Switches

| | | |
|------|---------|--|
| J9-1 | GRY-BLK | Matrixed switches, Column 9 from I/O Board, J202-1 |
| J9-2 | WHT-BLK | Matrixed switches, Row 1 from I/O Board, J200-1 |
| J9-3 | WHT-BRN | Matrixed switches, Row 2 from I/O Board, J200-2 |
| J9-4 | WHT-RED | Matrixed switches, Row 3 from I/O Board, J200-3 |
| J9-5 | WHT-ORN | Matrixed switches, Row 4 from I/O Board, J200-4 |
| J9-6 | WHT-YEL | Matrixed switches, Row 5 from I/O Board, J200-5 |
| J9-7 | WHT-GRN | Matrixed switches, Row 6 from I/O Board, J200-6 |
| J9-8 | WHT-BLU | Matrixed switches, Row 7 from I/O Board, J200-7 |
| J9-9 | WHT-VIO | Matrixed switches, Row 8 from I/O Board, J200-8 |

PWR1 Power Input

| | | |
|--------|----------|----------------------------|
| PWR1-1 | RED | +5VDC from ATX Pwr Supply |
| PWR1-2 | BLK | Ground from ATX Pwr Supply |
| PWR1-3 | Not Used | |
| PWR1-4 | Not Used | |



Upper Left Opto I/O Board, 15-000007-00
Connector Pin-outs

J1 Matrixed Sw 73 [3-Ball Chest Lock #1 (left) Opto Pair]

| | | |
|------|-----|---|
| J1-1 | GRN | RX of 3-Ball Chest Lock #1 opto pair ("E" lead) |
| J1-2 | WHT | RX of 3-Ball Chest Lock #1 opto pair ("C" lead) |
| J1-3 | BLK | TX of 3-Ball Chest Lock #1 opto pair ("K" lead) |
| J1-4 | RED | TX of 3-Ball Chest Lock #1 opto pair ("A" lead) |

J2 Matrixed Sw 74 [3-Ball Chest Lock #2 Opto Pair]

| | | |
|------|-----|---|
| J2-1 | GRN | RX of 3-Ball Chest Lock #2 opto pair ("E" lead) |
| J2-2 | WHT | RX of 3-Ball Chest Lock #2 opto pair ("C" lead) |
| J2-3 | BLK | TX of 3-Ball Chest Lock #2 opto pair ("K" lead) |
| J2-4 | RED | TX of 3-Ball Chest Lock #2 opto pair ("A" lead) |

J3 Matrixed Sw 75 [3-Ball Chest Lock #3 (Right) Opto Pair]

| | | |
|------|-----|---|
| J3-1 | GRN | RX of 3-Ball Chest Lock #3 opto pair ("E" lead) |
| J3-2 | WHT | RX of 3-Ball Chest Lock #3 opto pair ("C" lead) |
| J3-3 | BLK | TX of 3-Ball Chest Lock #3 opto pair ("K" lead) |
| J3-4 | RED | TX of 3-Ball Chest Lock #3 opto pair ("A" lead) |

J4 Matrixed Sw 76 [Treasure Chest Lane Opto Pair]

| | | |
|------|-----|--|
| J4-1 | GRN | RX of Treasure Chest Lane opto pair ("E" lead) |
| J4-2 | WHT | RX of Treasure Chest Lane opto pair ("C" lead) |
| J4-3 | BLK | TX of Treasure Chest Lane opto pair ("K" lead) |
| J4-4 | RED | TX of Treasure Chest Lane opto pair ("A" lead) |

J5 Matrixed Sw 77 [Left Orbit Enter Opto Pair]

| | | |
|------|-----|---|
| J5-1 | GRN | RX of Left Orbit Enter opto pair ("E" lead) |
| J5-2 | WHT | RX of Left Orbit Enter opto pair ("C" lead) |
| J5-3 | BLK | TX of Left Orbit Enter opto pair ("K" lead) |
| J5-4 | RED | TX of Left Orbit Enter opto pair ("A" lead) |

J6 Matrixed Sw 78 [Right Orbit Made Opto Pair]

| | | |
|------|-----|---|
| J6-1 | GRN | RX of Right Orbit Made opto pair ("E" lead) |
| J6-2 | WHT | RX of Right Orbit Made opto pair ("C" lead) |
| J6-3 | BLK | TX of Right Orbit Made opto pair ("K" lead) |
| J6-4 | RED | TX of Right Orbit Made opto pair ("A" lead) |

J7 Matrixed Sw 79 [Target Ship Bullseye Opto Pair]

| | | |
|------|-----|---|
| J7-1 | GRN | RX of Target Ship Bullseye opto pair ("E" lead) |
| J7-2 | WHT | RX of Target Ship Bullseye opto pair ("C" lead) |
| J7-3 | BLK | TX of Target Ship Bullseye opto pair ("K" lead) |
| J7-4 | RED | TX of Target Ship Bullseye opto pair ("A" lead) |

J8 Matrixed Sw 80 [Left Orbit Made Opto Pair]

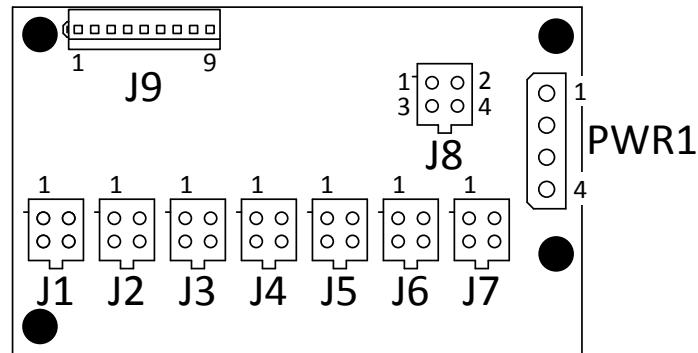
| | | |
|------|-----|--|
| J8-1 | GRN | RX of Left Orbit Made opto pair ("E" lead) |
| J8-2 | WHT | RX of Left Orbit Made opto pair ("C" lead) |
| J8-3 | BLK | TX of Left Orbit Made opto pair ("K" lead) |
| J8-4 | RED | TX of Left Orbit Made opto pair ("A" lead) |

J9 Matrixed Switches

| | | |
|------|---------|---|
| J9-1 | GRY-BRN | Matrixed switches, Column 10 from I/O Board, J202-2 |
| J9-2 | WHT-BLK | Matrixed switches, Row 1 from I/O Board, J200-1 |
| J9-3 | WHT-BRN | Matrixed switches, Row 2 from I/O Board, J200-2 |
| J9-4 | WHT-RED | Matrixed switches, Row 3 from I/O Board, J200-3 |
| J9-5 | WHT-ORN | Matrixed switches, Row 4 from I/O Board, J200-4 |
| J9-6 | WHT-YEL | Matrixed switches, Row 5 from I/O Board, J200-5 |
| J9-7 | WHT-GRN | Matrixed switches, Row 6 from I/O Board, J200-6 |
| J9-8 | WHT-BLU | Matrixed switches, Row 7 from I/O Board, J200-7 |
| J9-9 | WHT-VIO | Matrixed switches, Row 8 from I/O Board, J200-8 |

PWR1 Power Input

| | | |
|--------|----------|----------------------------|
| PWR1-1 | RED | +5VDC from ATX Pwr Supply |
| PWR1-2 | BLK | Ground from ATX Pwr Supply |
| PWR1-3 | Not Used | |
| PWR1-4 | Not Used | |



Lower Opto I/O Board, 15-000007-00

Connector Pin-outs

J1 Matrixed Sw 81 [MAP Subway Enter Opto Pair]

| | | |
|------|-----|---|
| J1-1 | GRN | RX of MAP Subway Enter opto pair ("E" lead) |
| J1-2 | WHT | RX of MAP Subway Enter opto pair ("C" lead) |
| J1-3 | BLK | TX of MAP Subway Enter opto pair ("K" lead) |
| J1-4 | RED | TX of MAP Subway Enter opto pair ("A" lead) |

J2 Matrixed Sw 82 [Bayou Subway Enter Opto Pair]

| | | |
|------|-----|---|
| J2-1 | GRN | RX of Bayou Subway Enter opto pair ("E" lead) |
| J2-2 | WHT | RX of Bayou Subway Enter opto pair ("C" lead) |
| J2-3 | BLK | TX of Bayou Subway Enter opto pair ("K" lead) |
| J2-4 | RED | TX of Bayou Subway Enter opto pair ("A" lead) |

J3 Matrixed Sw 83 [Maelstrom Subway Enter Opto Pair]

| | | |
|------|-----|---|
| J3-1 | GRN | RX of Maelstrom Subway Enter opto pair ("E" lead) |
| J3-2 | WHT | RX of Maelstrom Subway Enter opto pair ("C" lead) |
| J3-3 | BLK | TX of Maelstrom Subway Enter opto pair ("K" lead) |
| J3-4 | RED | TX of Maelstrom Subway Enter opto pair ("A" lead) |

J4 Matrixed Sw 84 [The Depths Scoop Opto Pair]

| | | |
|------|-----|---|
| J4-1 | GRN | RX of The Depths Scoop opto pair ("E" lead) |
| J4-2 | WHT | RX of The Depths Scoop opto pair ("C" lead) |
| J4-3 | BLK | TX of The Depths Scoop opto pair ("K" lead) |
| J4-4 | RED | TX of The Depths Scoop opto pair ("A" lead) |

J5 Matrixed Sw 85 [Tortuga VUK Opto Pair]

| | | |
|------|-----|--|
| J5-1 | GRN | RX of Tortuga VUK opto pair ("E" lead) |
| J5-2 | WHT | RX of Tortuga VUK opto pair ("C" lead) |
| J5-3 | BLK | TX of Tortuga VUK opto pair ("K" lead) |
| J5-4 | RED | TX of Tortuga VUK opto pair ("A" lead) |

J6 Matrixed Sw 86 [Devil's Triangle Spinner U-shaped Opto]

| | | |
|------|-----|--|
| J6-1 | GRN | RX of Devil's Triangle Spinner U-shaped opto |
| J6-2 | WHT | RX of Devil's Triangle Spinner U-shaped opto |
| J6-3 | BLK | TX of Devil's Triangle Spinner U-shaped opto |
| J6-4 | RED | TX of Devil's Triangle Spinner U-shaped opto |

J7 Matrixed Sw 87 [Maelstrom Ramp Enter Opto Pair]

| | | |
|------|-----|---|
| J7-1 | GRN | RX of Maelstrom Ramp Enter opto pair ("E" lead) |
| J7-2 | WHT | RX of Maelstrom Ramp Enter opto pair ("C" lead) |
| J7-3 | BLK | TX of Maelstrom Ramp Enter opto pair ("K" lead) |
| J7-4 | RED | TX of Maelstrom Ramp Enter opto pair ("A" lead) |

J8 Matrixed Sw 88 [Black Pearl Access Ramp Made Opto Pair]

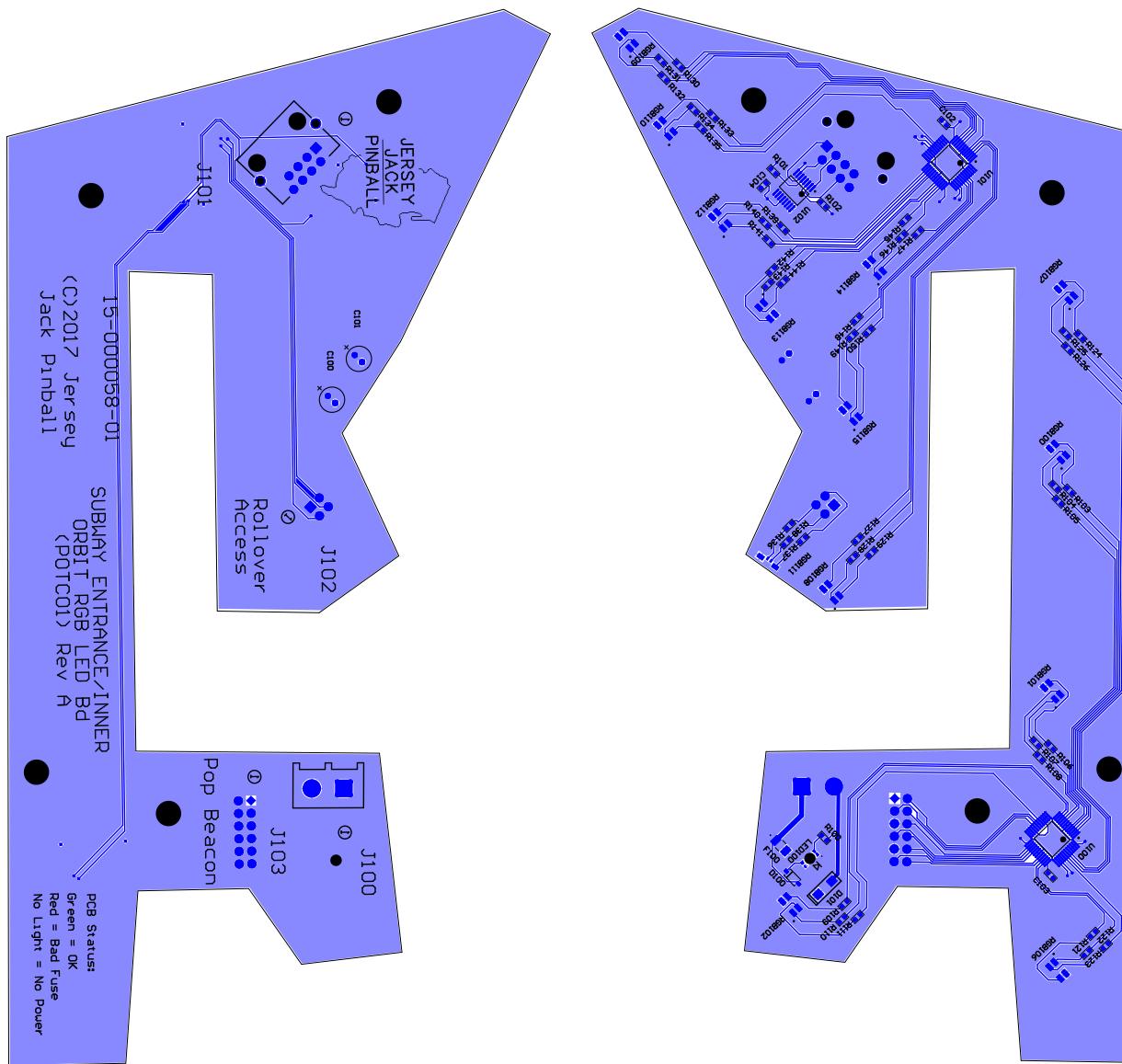
| | | |
|------|-----|---|
| J8-1 | GRN | RX of Black Pearl Access Ramp Made opto pair ("E" lead) |
| J8-2 | WHT | RX of Black Pearl Access Ramp Made opto pair ("C" lead) |
| J8-3 | BLK | TX of Black Pearl Access Ramp Made opto pair ("K" lead) |
| J8-4 | RED | TX of Black Pearl Access Ramp Made opto pair ("A" lead) |

J9 Matrixed Switches

| | | |
|------|---------|---|
| J9-1 | GRY-RED | Matrixed switches, Column 11 from I/O Board, J202-3 |
| J9-2 | WHT-BLK | Matrixed switches, Row 1 from I/O Board, J200-1 |
| J9-3 | WHT-BRN | Matrixed switches, Row 2 from I/O Board, J200-2 |
| J9-4 | WHT-RED | Matrixed switches, Row 3 from I/O Board, J200-3 |
| J9-5 | WHT-ORN | Matrixed switches, Row 4 from I/O Board, J200-4 |
| J9-6 | WHT-YEL | Matrixed switches, Row 5 from I/O Board, J200-5 |
| J9-7 | WHT-GRN | Matrixed switches, Row 6 from I/O Board, J200-6 |
| J9-8 | WHT-BLU | Matrixed switches, Row 7 from I/O Board, J200-7 |
| J9-9 | WHT-VIO | Matrixed switches, Row 8 from I/O Board, J200-8 |

PWR1 Power Input

| | | |
|--------|----------|----------------------------|
| PWR1-1 | RED | +5VDC from ATX Pwr Supply |
| PWR1-2 | BLK | Ground from ATX Pwr Supply |
| PWR1-3 | Not Used | |
| PWR1-4 | Not Used | |

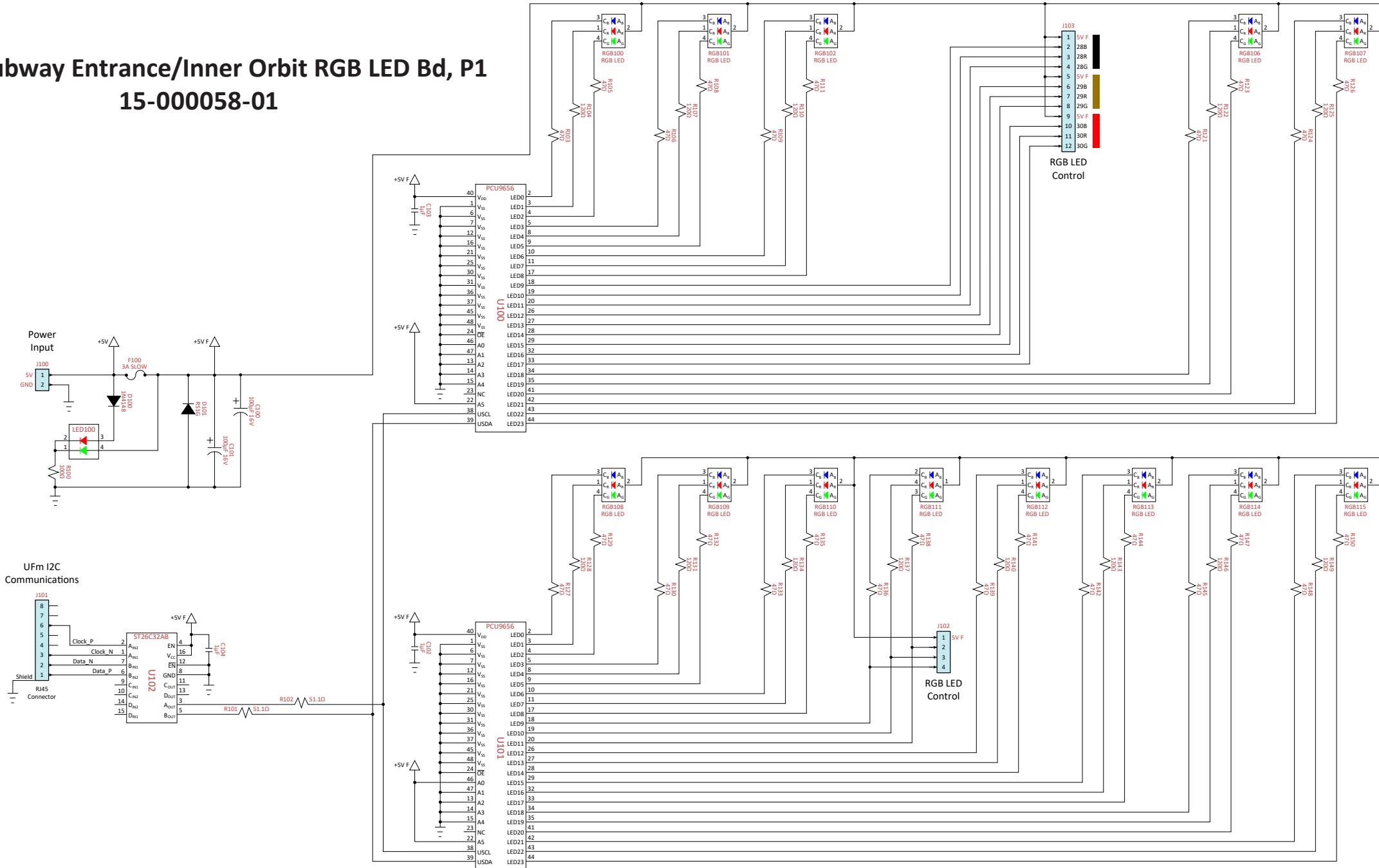


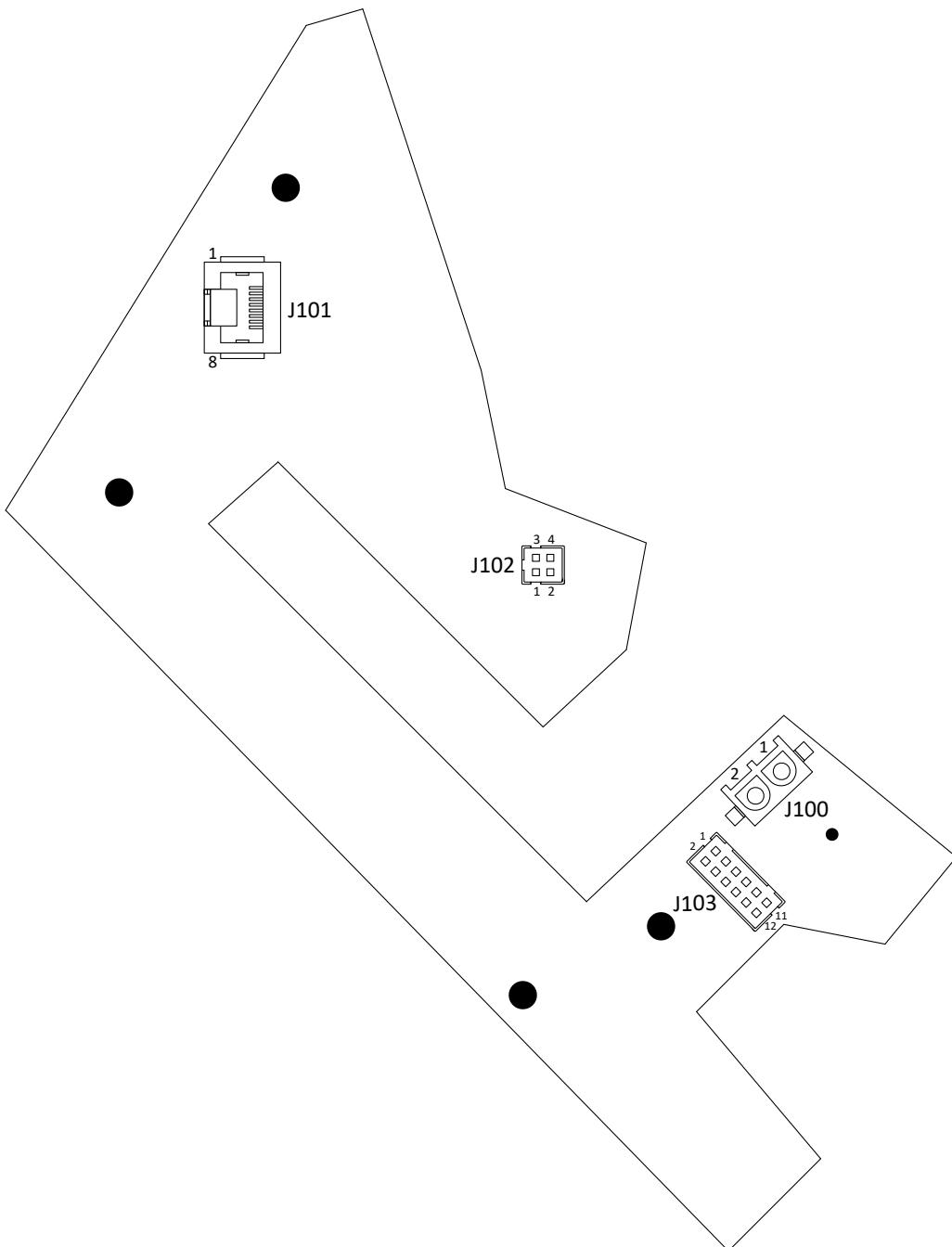
POTC Subway Entrance/Inner Orbit RGB LED Bd, P1

15-000058-01

| Component(s) | Part Number | Description |
|--|------------------------------|---|
| C100, C101 | 109-100M-016 | Capacitor, Elect (Radial), 100µF, 16V, 20% |
| C102-C104 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% |
| D100 | 110-1001-0S | Diode, 1N4148, SMT, 100V, 300mA |
| D101 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F100 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V |
| LED100 | 24-000024-0S | LED, SMD, Rev Mount, RED/GRN, 631/573nm |
| R100 | 122-0100-104 | Resistor, 0603 SMT, 100Ω, 0.1W, 5% |
| R101, R102 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| R103, R105, R106, R108, R109, R111, R121, R123, R124, R126, R127, R129, R130, R132, R133, R135, R136, R138, R139, R141, R142, R144, R145, R147, R148, R150 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R104, R107, R110, R122, R125, R128, R131, R134, R137, R140, R143, R146, R150 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB100-RGB102, RGB106-RGB110, RGB112-RGB115 RGB111 | 24-000027-0S 24-000032-0S | LED, SMT, RGB, 622/523/470nm LED, SMT, Side View, RGB, 632/518/468nm |
| U100, U101 | 140-0005-0S | LED Driver, I2C-Bus, 24-Bit, 5MHz, PCU9656, LQFP-48 SMT |
| U102 | 141-0020-0S | Quad Diff Line Rcvr w/3-State Outputs, ST26C32AB, TSSOP-16 SMT |
| J100 | 30-2005-02 | Header, Male, 2-pin, 6.35mm |
| J101 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |
| J102 | 30-2203-04 | Header, Male, 4-Pin, 2 Rows, 2.5mm |
| J103 | 30-2203-12 | Header, Male, 12-Pin, 2 Rows, 2.5mm |

POTC Subway Entrance/Inner Orbit RGB LED Bd, P1 15-000058-01





POTC Subway Entrance/Inner Orbit RGB LED Bd, P1

15-000058-01

Connector Pin-outs

J100 Power Input

J100-1 RED +5VDC from ATX Pwr Supply
J100-2 BLK Ground from ATX Pwr Supply

J101 UFM I2C Communications

CAT5 or higher Ethernet cable from Left Orbit & Upper Targets RGB LED Bd (P9), J901

J102 RGB LED Control

Not Used

J103 RGB LED Control (RGB Cable 19-009038-00)

RGB LED 28 [Right Beacon Flasher #1]

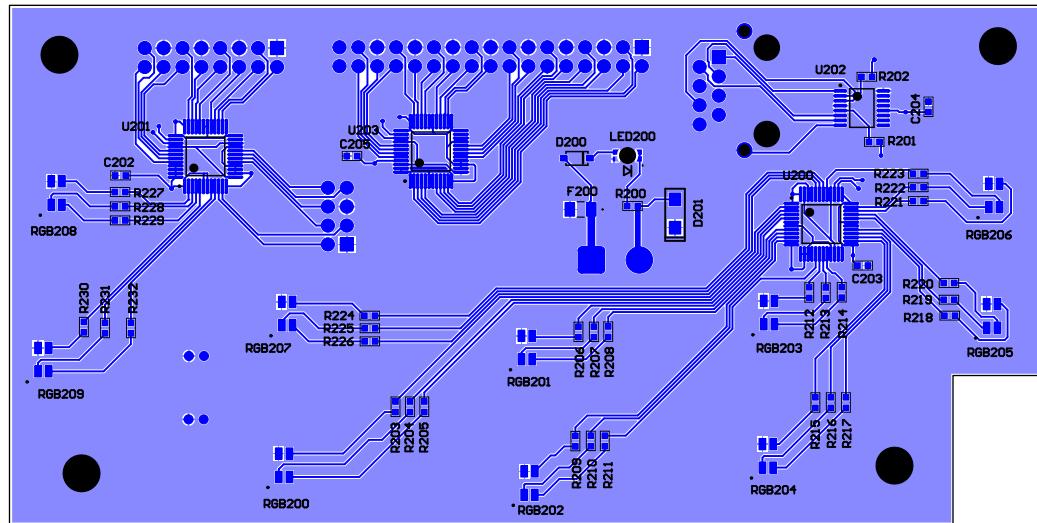
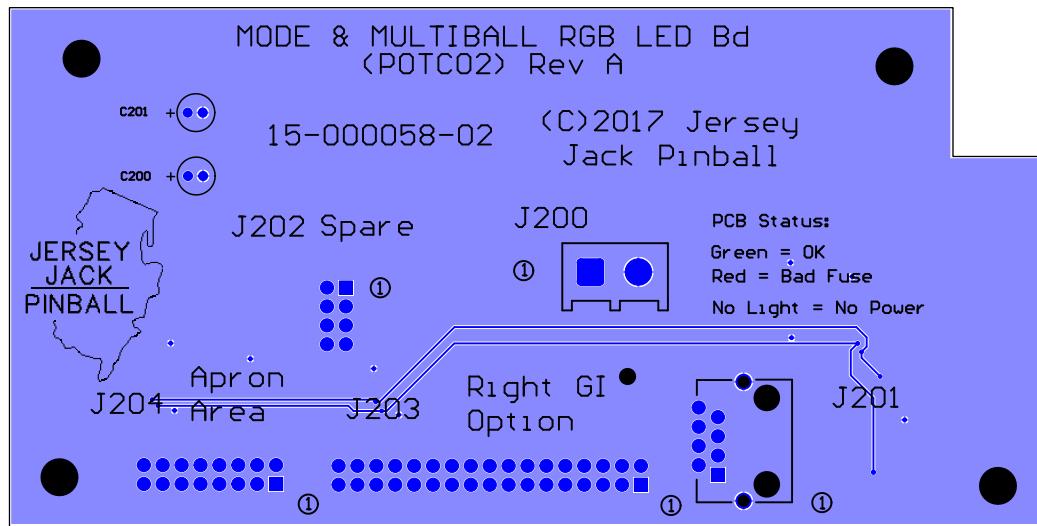
| | | |
|--------|---------|---|
| J103-1 | BLK | +5VDC to RGB Beacon Flasher Bd 28/29/30, J100-1 |
| J103-2 | BLK-BLU | RGB100 BLU return from RGB Beacon Flasher Bd 28/29/30, J100-2 |
| J103-3 | BLK-RED | RGB100 RED return from RGB Beacon Flasher Bd 28/29/30, J100-3 |
| J103-4 | BLK-GRN | RGB100 GRN return from RGB Beacon Flasher Bd 28/29/30, J100-4 |

RGB LED 29 [Right Beacon Flasher #2]

| | | |
|--------|----------|---|
| J103-5 | Not Used | |
| J103-6 | BRN-BLU | RGB101 BLU return from RGB Beacon Flasher Bd 28/29/30, J100-5 |
| J103-7 | BRN-RED | RGB101 RED return from RGB Beacon Flasher Bd 28/29/30, J100-6 |
| J103-8 | BRN-GRN | RGB101 GRN return from RGB Beacon Flasher Bd 28/29/30, J100-7 |

RGB LED 30 [Right Beacon Flasher #3]

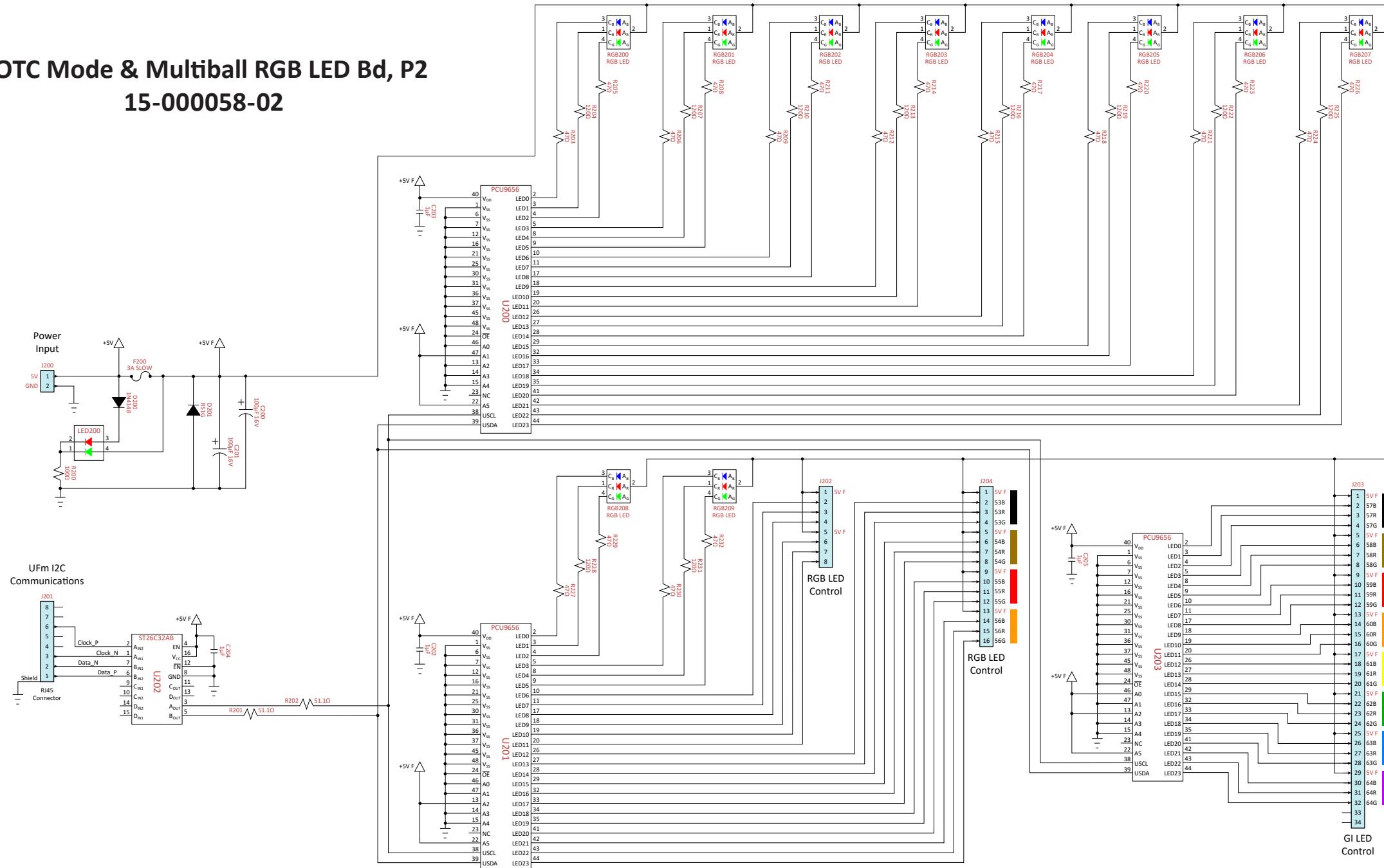
| | | |
|---------|----------|--|
| J103-9 | Not Used | |
| J103-10 | RED-BLU | RGB102 BLU return from RGB Beacon Flasher Bd 28/29/30, J100-8 |
| J103-11 | RED-GRY | RGB102 RED return from RGB Beacon Flasher Bd 28/29/30, J100-9 |
| J103-12 | RED-GRN | RGB102 GRN return from RGB Beacon Flasher Bd 28/29/30, J100-10 |

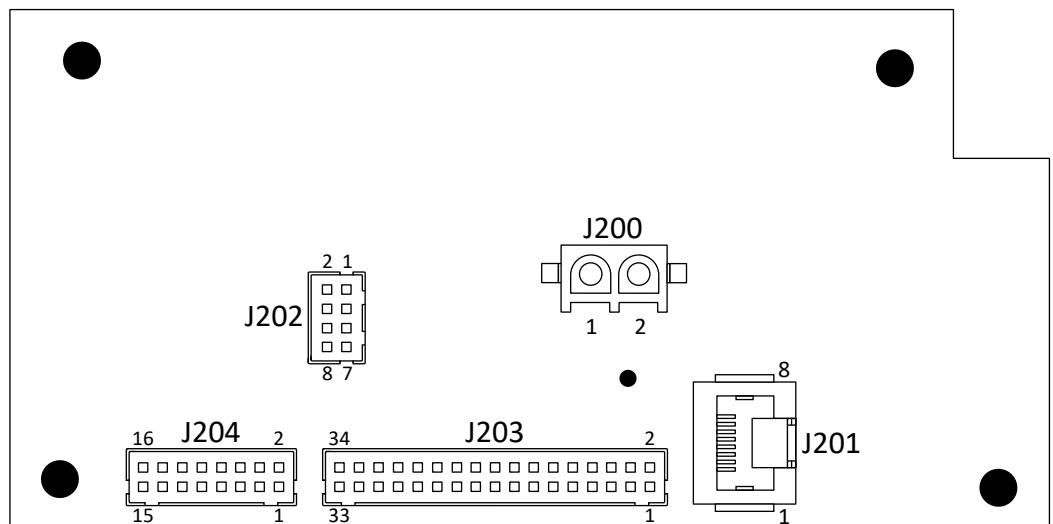


**POTC Mode & Multiball RGB LED Bd, P2
15-000058-02**

| Component(s) | Part Number | Description |
|---------------------|--------------------|--|
| C200, C201 | 109-100M-016 | Capacitor, Elect (Radial), 100µF, 16V, 20% |
| C202-C205 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% |
| D200 | 110-1001-0S | Diode, 1N4148, SMT, 100V, 300mA |
| D201 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F200 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V |
| LED200 | 24-000024-0S | LED, SMD, Rev Mount, RED/GRN, 631/573nm |
| R200 | 122-0100-104 | Resistor, 0603 SMT, 100Ω, 0.1W, 5% |
| R201, R202 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| R203, R205, R206, | | |
| R208, R209, R211, | | |
| R212, R214, R215, | | |
| R217, R218, R220, | | |
| R221, R223, R224, | | |
| R226, R227, R229, | | |
| R230, R232 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R204, R207, R210, | | |
| R213, R216, R219, | | |
| R222, R225, R228, | | |
| R231 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB200-RGB209 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| U200, U201, U203 | 140-0005-0S | LED Driver, I2C-Bus, 24-Bit, 5MHz, PCU9656, LQFP-48 SMT |
| U202 | 141-0020-0S | Quad Diff Line Rcvr w/3-State Outputs, ST26C32AB, TSSOP-16 SMT |
| J200 | 30-2005-02 | Header, Male, 2-pin, 6.35mm |
| J201 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |
| J202 | 30-2203-08 | Header, Male, 8-Pin, 2 Rows, 2.5mm |
| J203 | 30-2203-34 | Header, Male, 34-Pin, 2 Rows, 2.5mm |
| J204 | 30-2203-16 | Header, Male, 16-Pin, 2 Rows, 2.5mm |

POTC Mode & Multiball RGB LED Bd, P2 15-000058-02





POTC Mode & Multiball RGB LED Bd, P2

15-000058-02

Connector Pin-outs

J200 Power Input

- J200-1 RED +5VDC from ATX Pwr Supply
- J200-2 BLK Ground from ATX Pwr Supply

J201 UFM I2C Communications

CAT5 or higher Ethernet cable from Left Orbit & Upper Targets RGB LED Bd (P9), J902

J202 RGB LED Control

Not Used

J203 GI LED Control (RGB GI Cable 19-003125-10, LE & CE Games)

GI LED 57 [Shooter Lane High]

| | | |
|--------|---------|---|
| J203-1 | BLK | +5VDC to RGB GI Bd 57, J100-1 |
| J203-2 | BLK-BLU | RGB100 BLU return from RGB GI Bd 57, J100-2 |
| J203-3 | BLK-RED | RGB100 RED return from RGB GI Bd 57, J100-3 |
| J203-4 | BLK-GRN | RGB100 GRN return from RGB GI Bd 57, J100-4 |

GI LED 58 [Shooter Lane Low]

| | | |
|--------|---------|---|
| J203-5 | BRN | +5VDC to RGB GI Bd 58, J100-1 |
| J203-6 | BRN-BLU | RGB100 BLU return from RGB GI Bd 58, J100-2 |
| J203-7 | BRN-RED | RGB100 RED return from RGB GI Bd 58, J100-3 |
| J203-8 | BRN-GRN | RGB100 GRN return from RGB GI Bd 58, J100-4 |

GI LED 59 [Right Outlane Guide High]

| | | |
|---------|---------|---|
| J203-9 | RED | +5VDC to RGB GI Bd 59, J100-1 |
| J203-10 | RED-BLU | RGB100 BLU return from RGB GI Bd 59, J100-2 |
| J203-11 | RED-GRY | RGB100 RED return from RGB GI Bd 59, J100-3 |
| J203-12 | RED-GRN | RGB100 GRN return from RGB GI Bd 59, J100-4 |

GI LED 60 [Right Outlane Guide Low]

| | | |
|---------|---------|---|
| J203-13 | ORN | +5VDC to RGB GI Bd 60, J100-1 |
| J203-14 | ORN-BLU | RGB100 BLU return from RGB GI Bd 60, J100-2 |
| J203-15 | ORN-RED | RGB100 RED return from RGB GI Bd 60, J100-3 |
| J203-16 | ORN-GRN | RGB100 GRN return from RGB GI Bd 60, J100-4 |

GI LED 61 [Right Flipper Guide High]

| | | |
|---------|---------|---|
| J203-17 | YEL | +5VDC to RGB GI Bd 61, J100-1 |
| J203-18 | YEL-BLU | RGB100 BLU return from RGB GI Bd 61, J100-2 |
| J203-19 | YEL-RED | RGB100 RED return from RGB GI Bd 61, J100-3 |
| J203-20 | YEL-GRN | RGB100 GRN return from RGB GI Bd 61, J100-4 |

GI LED 62 [Right Flipper Guide Low]

| | | |
|---------|---------|---|
| J203-21 | GRN | +5VDC to RGB GI Bd 62, J100-1 |
| J203-22 | GRN-BLU | RGB100 BLU return from RGB GI Bd 62, J100-2 |
| J203-23 | GRN-RED | RGB100 RED return from RGB GI Bd 62, J100-3 |
| J203-24 | GRN-GRY | RGB100 GRN return from RGB GI Bd 62, J100-4 |

GI LED 63 [Right Sling Bottom]

| | | | |
|---------|---|---------|---|
| J203-25 |  | BLU | +5VDC to RGB GI Bd 63, J100-1 |
| J203-26 | | BLU-GRY | RGB100 BLU return from RGB GI Bd 63, J100-2 |
| J203-27 | | BLU-RED | RGB100 RED return from RGB GI Bd 63, J100-3 |
| J203-28 | | BLU-GRN | RGB100 GRN return from RGB GI Bd 63, J100-4 |

GI LED 64 [Right Sling Top]

| | | | |
|---------|---|----------|---|
| J203-29 |  | VIO | +5VDC to RGB GI Bd 64, J100-1 |
| J203-30 | | VIO-BLU | RGB100 BLU return from RGB GI Bd 64, J100-2 |
| J203-31 | | VIO-RED | RGB100 RED return from RGB GI Bd 64, J100-3 |
| J203-32 | | VIO-GRN | RGB100 GRN return from RGB GI Bd 64, J100-4 |
| J203-33 | | Not Used | |
| J203-34 | | Not Used | |

J203 GI LED Control (GI Cable 19-003125-00, Std Games)**GI LED 57 [Shooter Lane High]**

| | | | |
|--------|---|----------|---|
| J203-1 |  | GRY | +5VDC to GI LED Bd 57, J100-1 |
| J203-2 | | GRY-BLK | LED100 return from GI LED Bd 57, J100-2 |
| J203-3 | | Not Used | |
| J203-4 | | Not Used | |

GI LED 58 [Shooter Lane Low]

| | | | |
|--------|---|----------|---|
| J203-5 |  | GRY | +5VDC to GI LED Bd 58, J100-1 |
| J203-6 | | GRY-BRN | LED100 return from GI LED Bd 58, J100-2 |
| J203-7 | | Not Used | |
| J203-8 | | Not Used | |

GI LED 59 [Right Outlane Guide High]

| | | | |
|---------|---|----------|---|
| J203-9 |  | GRY | +5VDC to GI LED Bd 59, J100-1 |
| J203-10 | | GRY-RED | LED100 return from GI LED Bd 59, J100-2 |
| J203-11 | | Not Used | |
| J203-12 | | Not Used | |

GI LED 60 [Right Outlane Guide Low]

| | | | |
|---------|---|----------|---|
| J203-13 |  | GRY | +5VDC to GI LED Bd 60, J100-1 |
| J203-14 | | GRY-ORN | LED100 return from GI LED Bd 60, J100-2 |
| J203-15 | | Not Used | |
| J203-16 | | Not Used | |

GI LED 61 [Right Flipper Guide High]

| | | | |
|---------|---|----------|---|
| J203-17 |  | GRY | +5VDC to GI LED Bd 61, J100-1 |
| J203-18 | | GRY-YEL | LED100 return from GI LED Bd 61, J100-2 |
| J203-19 | | Not Used | |
| J203-20 | | Not Used | |

GI LED 62 [Right Flipper Guide Low]

| | | | |
|---------|---|----------|---|
| J203-21 |  | GRY | +5VDC to GI LED Bd 62, J100-1 |
| J203-22 | | GRY-GRN | LED100 return from GI LED Bd 62, J100-2 |
| J203-23 | | Not Used | |
| J203-24 | | Not Used | |

GI LED 63 [Right Sling Bottom]

| | | | |
|---------|---|----------|---|
| J203-25 |  | GRY | +5VDC to GI LED Bd 63, J100-1 |
| J203-26 | | GRY-BLU | LED100 return from GI LED Bd 63, J100-2 |
| J203-27 | | Not Used | |
| J203-28 | | Not Used | |

GI LED 64 [Right Sling Top]

| | | | |
|---------|---|----------|---|
| J203-29 |  | GRY | +5VDC to GI LED Bd 64, J100-1 |
| J203-30 | | GRY-VIO | LED100 return from GI LED Bd 64, J100-2 |
| J203-31 | | Not Used | |
| J203-32 | | Not Used | |
| J203-33 | | Not Used | |
| J203-34 | | Not Used | |

J204 RGB LED Control (RGB Cables 19-009038-05 & 19-009038-06)**RGB LED 53 [Shoot Again]**

| | | | |
|--------|---|---------|---|
| J204-1 |  | BLK | +5VDC to RGB GI Bd 53, J100-1 |
| J204-2 | | BLK-BLU | RGB100 BLU return from RGB GI Bd 53, J100-2 |
| J204-3 | | BLK-RED | RGB100 RED return from RGB GI Bd 53, J100-3 |
| J204-4 | | BLK-GRN | RGB100 GRN return from RGB GI Bd 53, J100-4 |

RGB LED 54 [Action Button] (RGB Cable 19-009038-06)

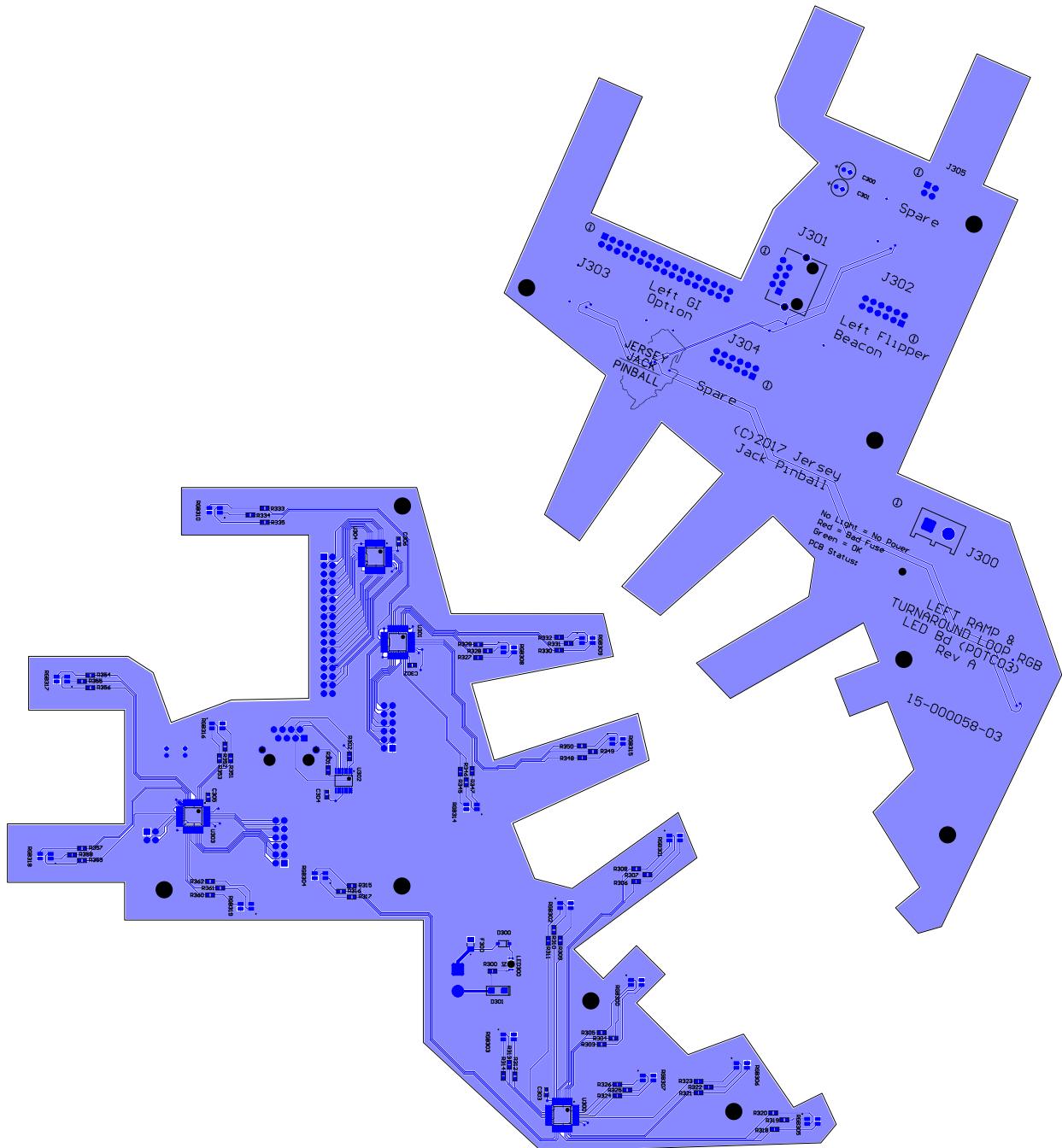
| | | | |
|--------|---|---------|---|
| J204-5 |  | BRN | +5VDC to RGB GI Bd 54, J100-1 |
| J204-6 | | BRN-BLU | RGB100 BLU return from RGB GI Bd 54, J100-2 |
| J204-7 | | BRN-RED | RGB100 RED return from RGB GI Bd 54, J100-3 |
| J204-8 | | BRN-GRN | RGB100 GRN return from RGB GI Bd 54, J100-4 |

RGB LED 55 [Tilt Warning 1]

| | | | |
|---------|---|---------|---|
| J204-9 |  | RED | +5VDC to RGB GI Bd 55, J100-1 |
| J204-10 | | RED-BLU | RGB100 BLU return from RGB GI Bd 55, J100-2 |
| J204-11 | | RED-GRY | RGB100 RED return from RGB GI Bd 55, J100-3 |
| J204-12 | | RED-GRN | RGB100 GRN return from RGB GI Bd 55, J100-4 |

RGB LED 56 [Tilt Warning 2]

| | | | |
|---------|---|---------|---|
| J204-13 |  | ORN | +5VDC to RGB GI Bd 56, J100-1 |
| J204-14 | | ORN-BLU | RGB100 BLU return from RGB GI Bd 56, J100-2 |
| J204-15 | | ORN-RED | RGB100 RED return from RGB GI Bd 56, J100-3 |
| J204-16 | | ORN-GRN | RGB100 GRN return from RGB GI Bd 56, J100-4 |



POTC Left Ramp & Turnaround Loop RGB LED Bd, P3 15-000058-03

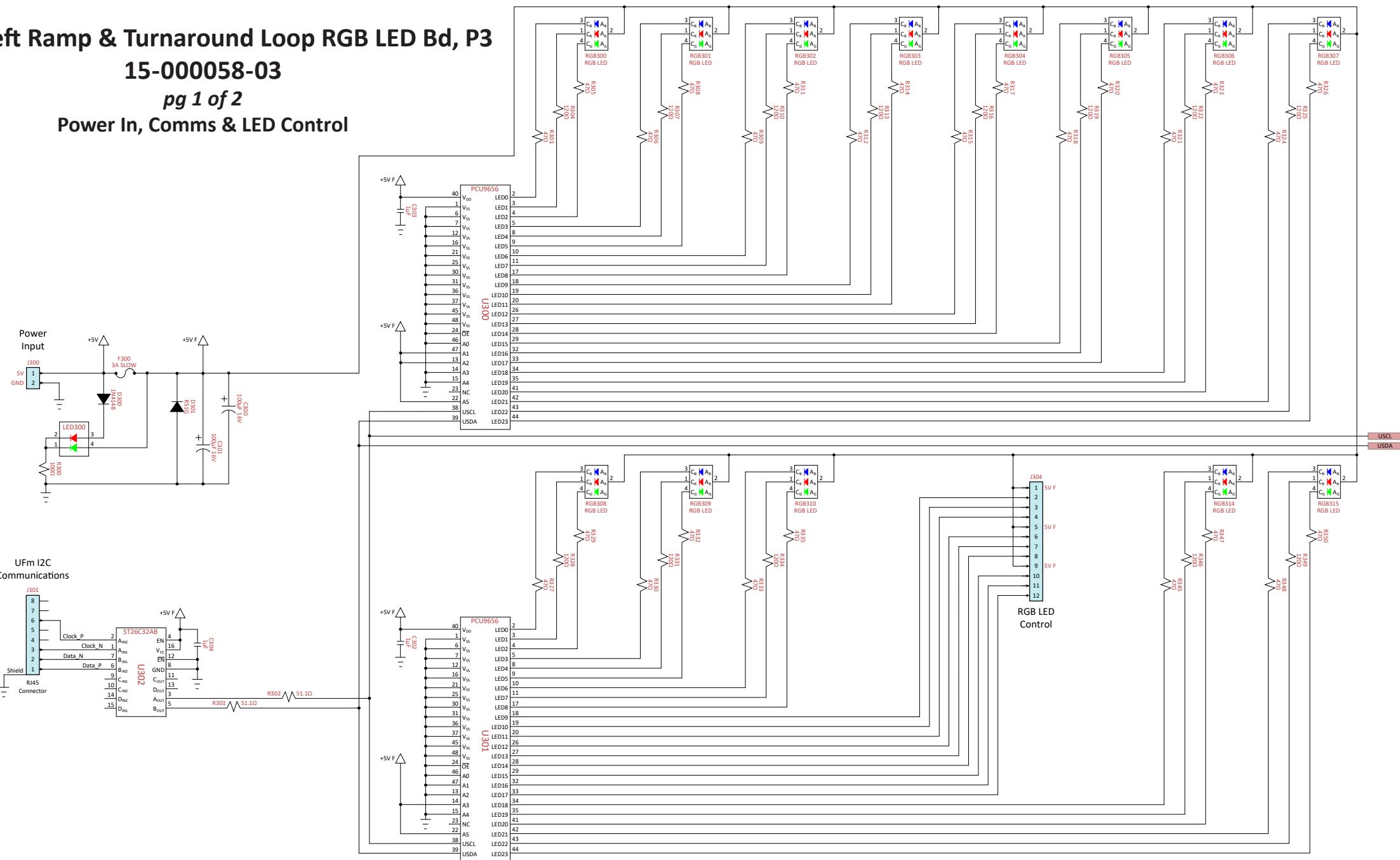
| Component(s) | Part Number | Description |
|-------------------|--------------|--|
| C300, C301 | 109-100M-016 | Capacitor, Elect (Radial), 100µF, 16V, 20% |
| C302-C306 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% |
| D300 | 110-1001-0S | Diode, 1N4148, SMT, 100V, 300mA |
| D301 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F300 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V |
| LED300 | 24-000024-0S | LED, SMD, Rev Mount, RED/GRN, 631/573nm |
| R300 | 122-0100-104 | Resistor, 0603 SMT, 100Ω, 0.1W, 5% |
| R301, R302 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| R303, R305, R306, | | |
| R308, R309, R311, | | |
| R312, R314, R315, | | |
| R317, R318, R320, | | |
| R321, R323, R324, | | |
| R326, R327, R329, | | |
| R330, R332, R333, | | |
| R335, R345, R347, | | |
| R348, R350, R351, | | |
| R353, R354, R356, | | |
| R357, R359, R360, | | |
| R362 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R304, R307, R310, | | |
| R313, R316, R319, | | |
| R322, R325, R328, | | |
| R331, R334, R346, | | |
| R349, R352, R355, | | |
| R358, R361 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB300-RGB310, | | |
| RGB314-RGB319 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| U300, U301, | | |
| U303, U304 | 140-0005-0S | LED Driver, I2C-Bus, 24-Bit, 5MHz, PCU9656, LQFP-48 SMT |
| U302 | 141-0020-0S | Quad Diff Line Rcvr w/3-State Outputs, ST26C32AB, TSSOP-16 SMT |
| J300 | 30-2005-02 | Header, Male, 2-pin, 6.35mm |
| J301 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |
| J302, J304 | 30-2203-12 | Header, Male, 12-Pin, 2 Rows, 2.5mm |
| J303 | 30-2203-34 | Header, Male, 34-Pin, 2 Rows, 2.5mm |
| J305 | 30-2203-04 | Header, Male, 4-Pin, 2 Rows, 2.5mm |

POTC Left Ramp & Turnaround Loop RGB LED Bd, P3

15-000058-03

pg 1 of 2

Power In, Comms & LED Control

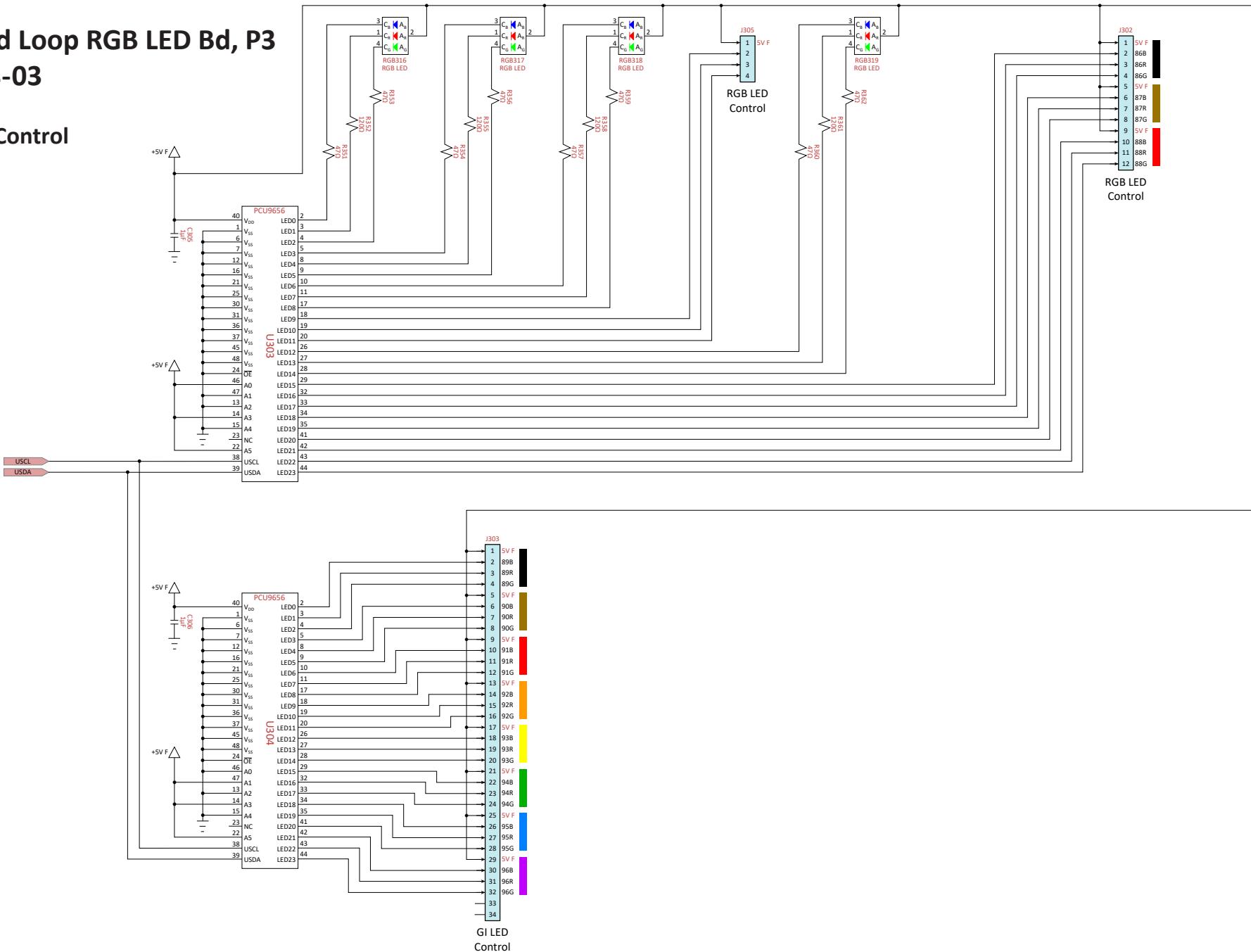


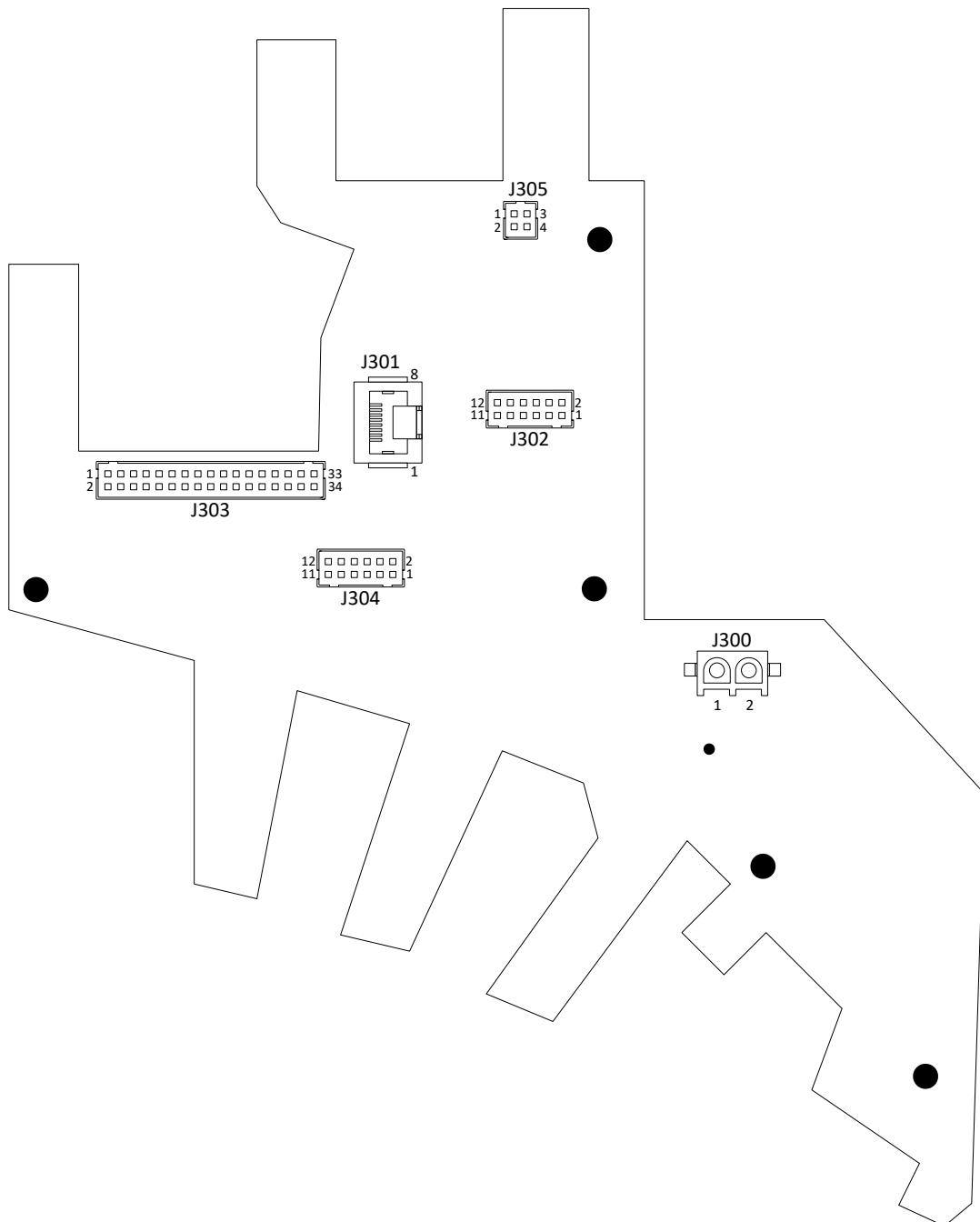
POTC Left Ramp & Turnaround Loop RGB LED Bd, P3

15-000058-03

pg 2 of 2

Additional LED Control





POTC Left Ramp & Turnaround Loop RGB LED Bd, P3

15-000058-03

Connector Pin-outs

J300 Power Input

- | | | |
|--------|-----|----------------------------|
| J300-1 | RED | +5VDC from ATX Pwr Supply |
| J300-2 | BLK | Ground from ATX Pwr Supply |

J301 UFM I2C Communications

CAT5 or higher Ethernet cable from Left Orbit & Upper Targets RGB LED Bd (P9), J903

J302 RGB LED Control (RGB Cable 19-009038-00)

RGB LED 86 [Left Beacon Flasher #1]

- | | | |
|--------|---------|---|
| J302-1 | BLK | +5VDC to RGB Beacon Flasher Bd 86/87/88, J100-1 |
| J302-2 | BLK-BLU | RGB100 BLU return from RGB Beacon Flasher Bd 86/87/88, J100-2 |
| J302-3 | BLK-RED | RGB100 RED return from RGB Beacon Flasher Bd 86/87/88, J100-3 |
| J302-4 | BLK-GRN | RGB100 GRN return from RGB Beacon Flasher Bd 86/87/88, J100-4 |

RGB LED 87 [Left Beacon Flasher #2]

- | | | |
|--------|----------|---|
| J302-5 | Not Used | |
| J302-6 | BRN-BLU | RGB101 BLU return from RGB Beacon Flasher Bd 86/87/88, J100-5 |
| J302-7 | BRN-RED | RGB101 RED return from RGB Beacon Flasher Bd 86/87/88, J100-6 |
| J302-8 | BRN-GRN | RGB101 GRN return from RGB Beacon Flasher Bd 86/87/88, J100-7 |

RGB LED 88 [Left Beacon Flasher #3]

- | | | |
|---------|----------|--|
| J302-9 | Not Used | |
| J302-10 | RED-BLU | RGB102 BLU return from RGB Beacon Flasher Bd 86/87/88, J100-8 |
| J302-11 | RED-GRY | RGB102 RED return from RGB Beacon Flasher Bd 86/87/88, J100-9 |
| J302-12 | RED-GRN | RGB102 GRN return from RGB Beacon Flasher Bd 86/87/88, J100-10 |

J303 GI LED Control (RGB GI Cable 19-003125-13, LE & CE Games)

GI LED 89 [Left Flipper Guide Low]

- | | | |
|--------|---------|---|
| J303-1 | BLK | +5VDC to RGB GI Bd 89, J100-1 |
| J303-2 | BLK-BLU | RGB100 BLU return from RGB GI Bd 89, J100-2 |
| J303-3 | BLK-RED | RGB100 RED return from RGB GI Bd 89, J100-3 |
| J303-4 | BLK-GRN | RGB100 GRN return from RGB GI Bd 89, J100-4 |

GI LED 90 [Left Flipper Guide High]

- | | | |
|--------|---------|---|
| J303-5 | BRN | +5VDC to RGB GI Bd 90, J100-1 |
| J303-6 | BRN-BLU | RGB100 BLU return from RGB GI Bd 90, J100-2 |
| J303-7 | BRN-RED | RGB100 RED return from RGB GI Bd 90, J100-3 |
| J303-8 | BRN-GRN | RGB100 GRN return from RGB GI Bd 90, J100-4 |

GI LED 91 [Left Return Lane Guide]

| | | |
|---------|---------|---|
| J303-9 | RED | +5VDC to RGB GI Bd 91, J100-1 |
| J303-10 | RED-BLU | RGB100 BLU return from RGB GI Bd 91, J100-2 |
| J303-11 | RED-GRY | RGB100 RED return from RGB GI Bd 91, J100-3 |
| J303-12 | RED-GRN | RGB100 GRN return from RGB GI Bd 91, J100-4 |

GI LED 92 [Left Outlane Guide Bottom]

| | | |
|---------|---------|---|
| J303-13 | ORN | +5VDC to RGB GI Bd 92, J100-1 |
| J303-14 | ORN-BLU | RGB100 BLU return from RGB GI Bd 92, J100-2 |
| J303-15 | ORN-RED | RGB100 RED return from RGB GI Bd 92, J100-3 |
| J303-16 | ORN-GRN | RGB100 GRN return from RGB GI Bd 92, J100-4 |

GI LED 93 [Left Inlane Guide]

| | | |
|---------|---------|---|
| J303-17 | YEL | +5VDC to RGB GI Bd 93, J100-1 |
| J303-18 | YEL-BLU | RGB100 BLU return from RGB GI Bd 93, J100-2 |
| J303-19 | YEL-RED | RGB100 RED return from RGB GI Bd 93, J100-3 |
| J303-20 | YEL-GRN | RGB100 GRN return from RGB GI Bd 93, J100-4 |

GI LED 94 [Left Sling Top]

| | | |
|---------|---------|---|
| J303-21 | GRN | +5VDC to RGB GI Bd 94, J100-1 |
| J303-22 | GRN-BLU | RGB100 BLU return from RGB GI Bd 94, J100-2 |
| J303-23 | GRN-RED | RGB100 RED return from RGB GI Bd 94, J100-3 |
| J303-24 | GRN-GRN | RGB100 GRN return from RGB GI Bd 94, J100-4 |

GI LED 95 [Left Sling Bottom]

| | | |
|---------|---------|---|
| J303-25 | BLU | +5VDC to RGB GI Bd 95, J100-1 |
| J303-26 | BLU-GRY | RGB100 BLU return from RGB GI Bd 95, J100-2 |
| J303-27 | BLU-RED | RGB100 RED return from RGB GI Bd 95, J100-3 |
| J303-28 | BLU-GRN | RGB100 GRN return from RGB GI Bd 95, J100-4 |

GI LED 96 [Left Outlane Guide Top]

| | | |
|---------|----------|---|
| J303-29 | VIO | +5VDC to RGB GI Bd 96, J100-1 |
| J303-30 | VIO-BLU | RGB100 BLU return from RGB GI Bd 96, J100-2 |
| J303-31 | VIO-RED | RGB100 RED return from RGB GI Bd 96, J100-3 |
| J303-32 | VIO-GRN | RGB100 GRN return from RGB GI Bd 96, J100-4 |
| J303-33 | Not Used | |
| J303-34 | Not Used | |

J303 GI LED Control (GI Cable 19-003125-03, Std Games)

GI LED 89 [Left Flipper Guide Low]

| | | |
|--------|----------|---|
| J303-1 | GRY | +5VDC to GI LED Bd 89, J100-1 |
| J303-2 | GRY-BLK | LED100 return from GI LED Bd 89, J100-2 |
| J303-3 | Not Used | |
| J303-4 | Not Used | |

GI LED 90 [Left Flipper Guide High]

| | | |
|--------|---------|---|
| J303-5 | GRY | +5VDC to GI LED Bd 90, J100-1 |
| J303-6 | GRY-BRN | LED100 return from GI LED Bd 90, J100-2 |

J303-7 Not Used

J303-8 Not Used

GI LED 91 [Left Return Lane Guide]

| | | |
|---------|----------|---|
| J303-9 | GRY | +5VDC to GI LED Bd 91, J100-1 |
| J303-10 | GRY-RED | LED100 return from GI LED Bd 91, J100-2 |
| J303-11 | Not Used | |
| J303-12 | Not Used | |

GI LED 92 [Left Outlane Guide Bottom]

| | | |
|---------|----------|---|
| J303-13 | GRY | +5VDC to GI LED Bd 92, J100-1 |
| J303-14 | GRY-ORN | LED100 return from GI LED Bd 92, J100-2 |
| J303-15 | Not Used | |
| J303-16 | Not Used | |

GI LED 93 [Left Inlane Guide]

| | | |
|---------|----------|---|
| J303-17 | GRY | +5VDC to GI LED Bd 93, J100-1 |
| J303-18 | GRY-YEL | LED100 return from GI LED Bd 93, J100-2 |
| J303-19 | Not Used | |
| J303-20 | Not Used | |

GI LED 94 [Left Sling Top]

| | | |
|---------|----------|---|
| J303-21 | GRY | +5VDC to GI LED Bd 94, J100-1 |
| J303-22 | GRY-GRN | LED100 return from GI LED Bd 94, J100-2 |
| J303-23 | Not Used | |
| J303-24 | Not Used | |

GI LED 95 [Left Sling Bottom]

| | | |
|---------|----------|---|
| J303-25 | GRY | +5VDC to GI LED Bd 95, J100-1 |
| J303-26 | GRY-BLU | LED100 return from GI LED Bd 95, J100-2 |
| J303-27 | Not Used | |
| J303-28 | Not Used | |

GI LED 96 [Left Outlane Guide Top]

| | | |
|---------|----------|---|
| J303-29 | GRY | +5VDC to GI LED Bd 96, J100-1 |
| J303-30 | GRY-VIO | LED100 return from GI LED Bd 96, J100-2 |
| J303-31 | Not Used | |
| J303-32 | Not Used | |
| J303-33 | Not Used | |
| J303-34 | Not Used | |

J304 RGB LED Control

Not Used

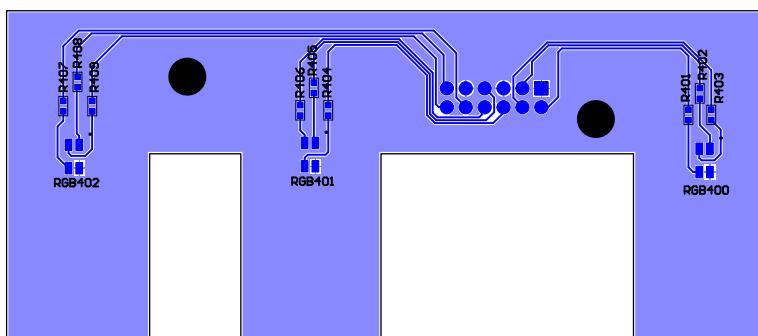
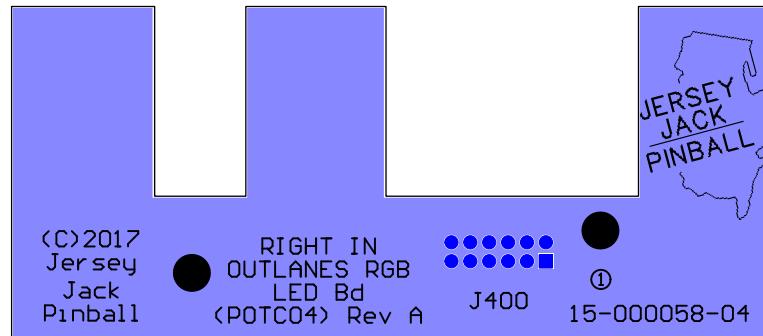
J305 RGB LED Control

Not Used

POTC Right In/Outlanes RGB LED Bd, P4

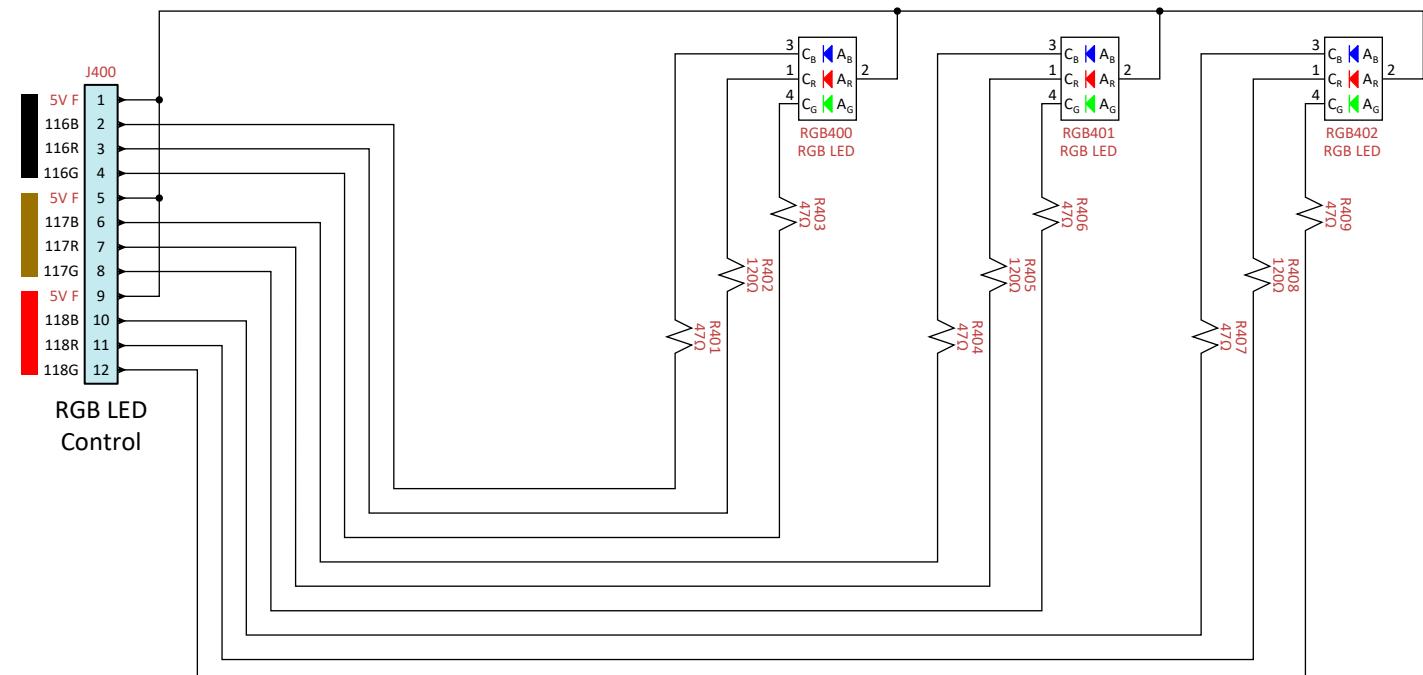
15-000058-04

| Component(s) | Part Number | Description |
|-------------------|--------------|-------------------------------------|
| R401, R403, R404, | | |
| R406, R407, R409 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R402, R405, R408 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB400-RGB402 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| J400 | 30-2203-12 | Header, Male, 12-Pin, 2 Rows, 2.5mm |

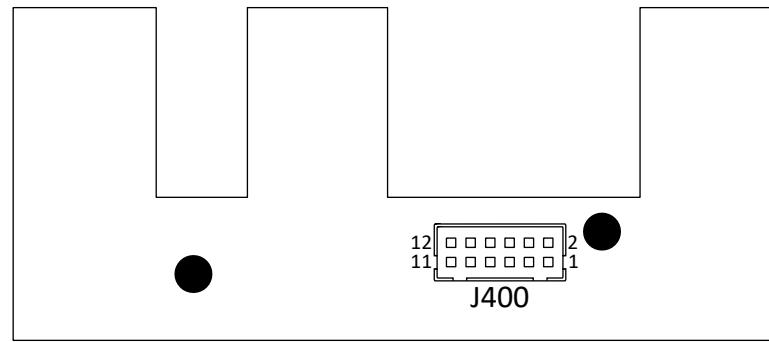


POTC Right In/Outlanes RGB LED Bd, P4

15-000058-04



POTC Right In/Outlanes RGB LED Bd, P4
15-000058-04
Connector Pin-outs



J400 RGB LED Control/Power Input (RGB Cable 19-009038-02)

RGB LED 116 [PIRATE]

| | | |
|--------|---------|---|
| J400-1 | BLK | +5VDC from Right Ramp & VUK RGB LED Bd (P5), J502-1 |
| J400-2 | BLK-BLU | RGB400 BLU return to Right Ramp & VUK RGB LED Bd (P5), J502-2 |
| J400-3 | BLK-RED | RGB400 RED return to Right Ramp & VUK RGB LED Bd (P5), J502-3 |
| J400-4 | BLK-GRN | RGB400 GRN return to Right Ramp & VUK RGB LED Bd (P5), J502-4 |

RGB LED 117 [PIRATE]

| | | |
|--------|---------|---|
| J400-5 | BRN | +5VDC from Right Ramp & VUK RGB LED Bd (P5), J502-5 |
| J400-6 | BRN-BLU | RGB401 BLU return to Right Ramp & VUK RGB LED Bd (P5), J502-6 |
| J400-7 | BRN-RED | RGB401 RED return to Right Ramp & VUK RGB LED Bd (P5), J502-7 |
| J400-8 | BRN-GRN | RGB401 GRN return to Right Ramp & VUK RGB LED Bd (P5), J502-8 |

RGB LED 118 [PIRATE]

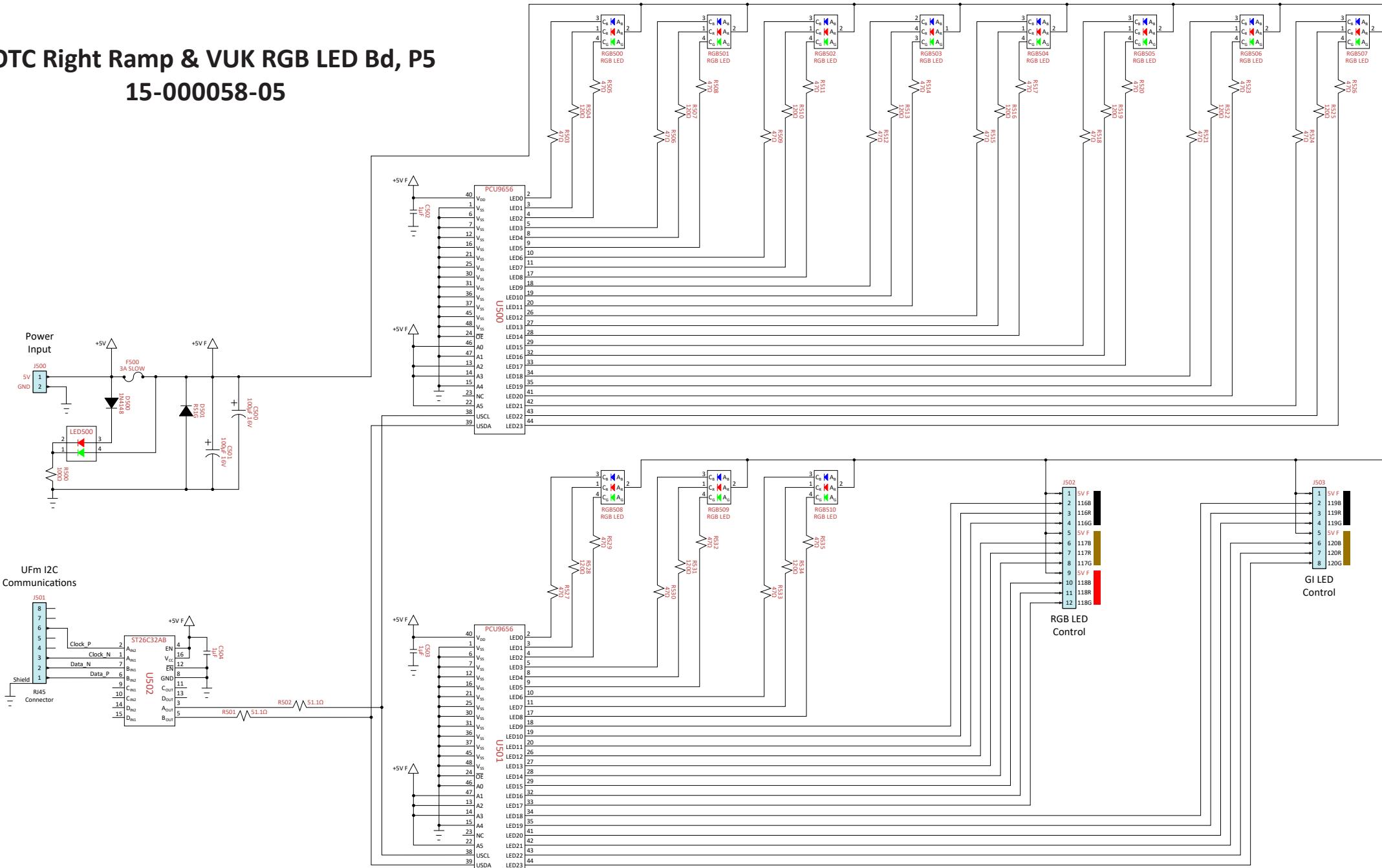
| | | |
|---------|---------|--|
| J400-9 | RED | +5VDC from Right Ramp & VUK RGB LED Bd (P5), J502-9 |
| J400-10 | RED-BLU | RGB402 BLU return to Right Ramp & VUK RGB LED Bd (P5), J502-10 |
| J400-11 | RED-GRY | RGB402 RED return to Right Ramp & VUK RGB LED Bd (P5), J502-11 |
| J400-12 | RED-GRN | RGB402 GRN return to Right Ramp & VUK RGB LED Bd (P5), J502-12 |

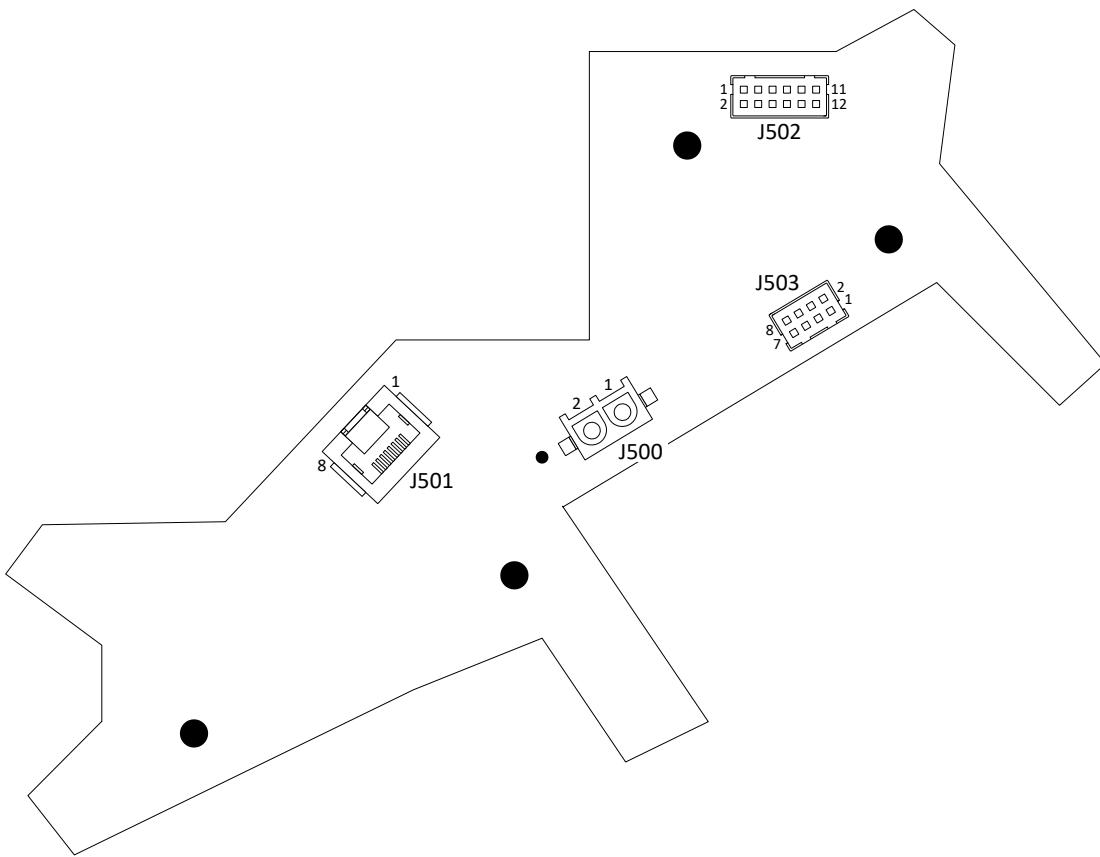


POTC Right Ramp & VUK RGB LED Bd, P5 15-000058-05

| Component(s) | Part Number | Description |
|---|--------------|--|
| C500, C501 | 109-100M-016 | Capacitor, Elect (Radial), 100µF, 16V, 20% |
| C502-C504 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% |
| D500 | 110-1001-0S | Diode, 1N4148, SMT, 100V, 300mA |
| D501 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F500 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V |
| LED500 | 24-000024-0S | LED, SMD, Rev Mount, RED/GRN, 631/573nm |
| R500 | 122-0100-104 | Resistor, 0603 SMT, 100Ω, 0.1W, 5% |
| R501, R502 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| R503, R505, R506, R508, R509, R511, R512, R514, R515, R517, R518, R520, R521, R523, R524, R526, R527, R529, R530, R532, R533, R535 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R504, R507, R510, R513, R516, R519, R522, R525, R528, R531, R534 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB500-RGB510 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| U500, U501 | 140-0005-0S | LED Driver, I2C-Bus, 24-Bit, 5MHz, PCU9656, LQFP-48 SMT |
| U502 | 141-0020-0S | Quad Diff Line Rcvr w/3-State Outputs, ST26C32AB, TSSOP-16 SMT |
| J500 | 30-2005-02 | Header, Male, 2-pin, 6.35mm |
| J501 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |
| J502 | 30-2203-12 | Header, Male, 12-Pin, 2 Rows, 2.5mm |
| J503 | 30-2203-08 | Header, Male, 8-Pin, 2 Rows, 2.5mm |

POTC Right Ramp & VUK RGB LED Bd, P5
15-000058-05





POTC Right Ramp & VUK RGB LED Bd, P5

15-000058-05

Connector Pin-outs

J500 Power Input

- J500-1 RED +5VDC from ATX Pwr Supply
- J500-2 BLK Ground from ATX Pwr Supply

J501 UFM I2C Communications

CAT5 or higher Ethernet cable from Left Orbit & Upper Targets RGB LED Bd (P9), J905

J502 RGB LED Control (RGB Cable 19-009038-02)

RGB LED 116 [PIRATE]

| | | |
|--------|---------|--|
| J502-1 | BLK | +5VDC to Right In/Outlanes RGB LED Bd (P4), J400-1 |
| J502-2 | BLK-BLU | RGB400 BLU return from Right In/Outlanes RGB LED Bd (P4), J400-2 |
| J502-3 | BLK-RED | RGB400 RED return from Right In/Outlanes RGB LED Bd (P4), J400-3 |
| J502-4 | BLK-GRN | RGB400 GRN return from Right In/Outlanes RGB LED Bd (P4), J400-4 |

RGB LED 117 [PIRATE]

| | | |
|--------|---------|--|
| J502-5 | BRN | +5VDC to Right In/Outlanes RGB LED Bd (P4), J400-5 |
| J502-6 | BRN-BLU | RGB401 BLU return from Right In/Outlanes RGB LED Bd (P4), J400-6 |
| J502-7 | BRN-RED | RGB401 RED return from Right In/Outlanes RGB LED Bd (P4), J400-7 |
| J502-8 | BRN-GRN | RGB401 GRN return from Right In/Outlanes RGB LED Bd (P4), J400-8 |

RGB LED 118 [PIRATE]

| | | |
|---------|---------|---|
| J502-9 | RED | +5VDC to Right In/Outlanes RGB LED Bd (P4), J400-9 |
| J502-10 | RED-BLU | RGB402 BLU return from Right In/Outlanes RGB LED Bd (P4), J400-10 |
| J502-11 | RED-GRY | RGB402 RED return from Right In/Outlanes RGB LED Bd (P4), J400-11 |
| J502-12 | RED-GRN | RGB402 GRN return from Right In/Outlanes RGB LED Bd (P4), J400-12 |

J503 GI LED Control (RGB GI Cable 19-003125-11, LE & CE Games)

GI LED 119 [Upper Sling Low]

| | | |
|--------|---------|--|
| J503-1 | BLK | +5VDC to RGB GI Bd 119, J100-1 |
| J503-2 | BLK-BLU | RGB100 BLU return from RGB GI Bd 119, J100-2 |
| J503-3 | BLK-RED | RGB100 RED return from RGB GI Bd 119, J100-3 |
| J503-4 | BLK-GRN | RGB100 GRN return from RGB GI Bd 119, J100-4 |

GI LED 120 [Upper Sling High]

| | | |
|--------|---------|--|
| J503-5 | BRN | +5VDC to RGB GI Bd 120, J100-1 |
| J503-6 | BRN-BLU | RGB100 BLU return from RGB GI Bd 120, J100-2 |
| J503-7 | BRN-RED | RGB100 RED return from RGB GI Bd 120, J100-3 |
| J503-8 | BRN-GRN | RGB100 GRN return from RGB GI Bd 120, J100-4 |

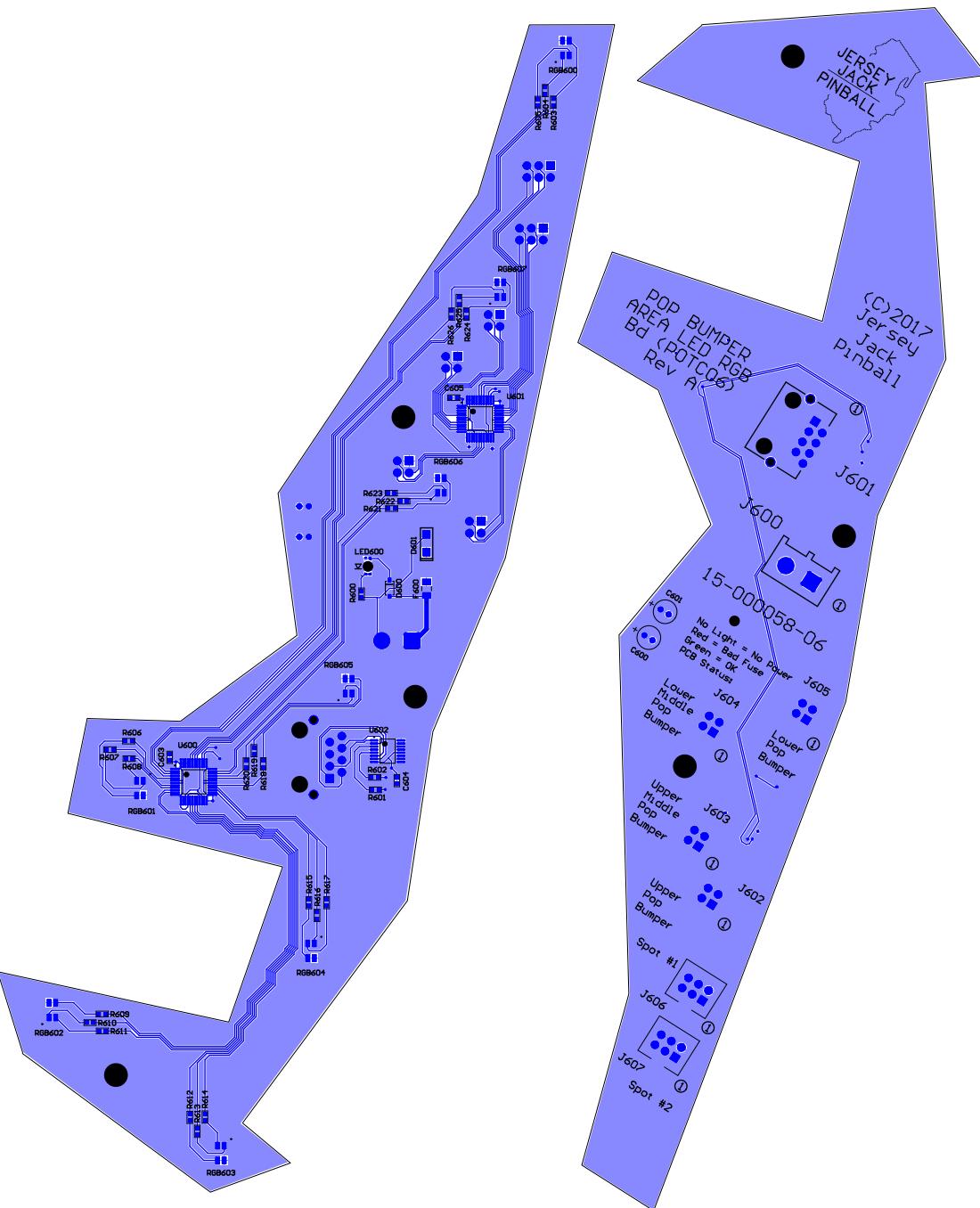
J503 GI LED Control (GI Cable 19-003125-01, Std Games)

GI LED 119 [Upper Sling Low]

| | | |
|--------|----------|--|
| J503-1 | GRY | +5VDC to GI LED Bd 119, J100-1 |
| J503-2 | GRY-BLK | LED100 return from GI LED Bd 119, J100-2 |
| J503-3 | Not Used | |
| J503-4 | Not Used | |

GI LED 120 [Upper Sling High]

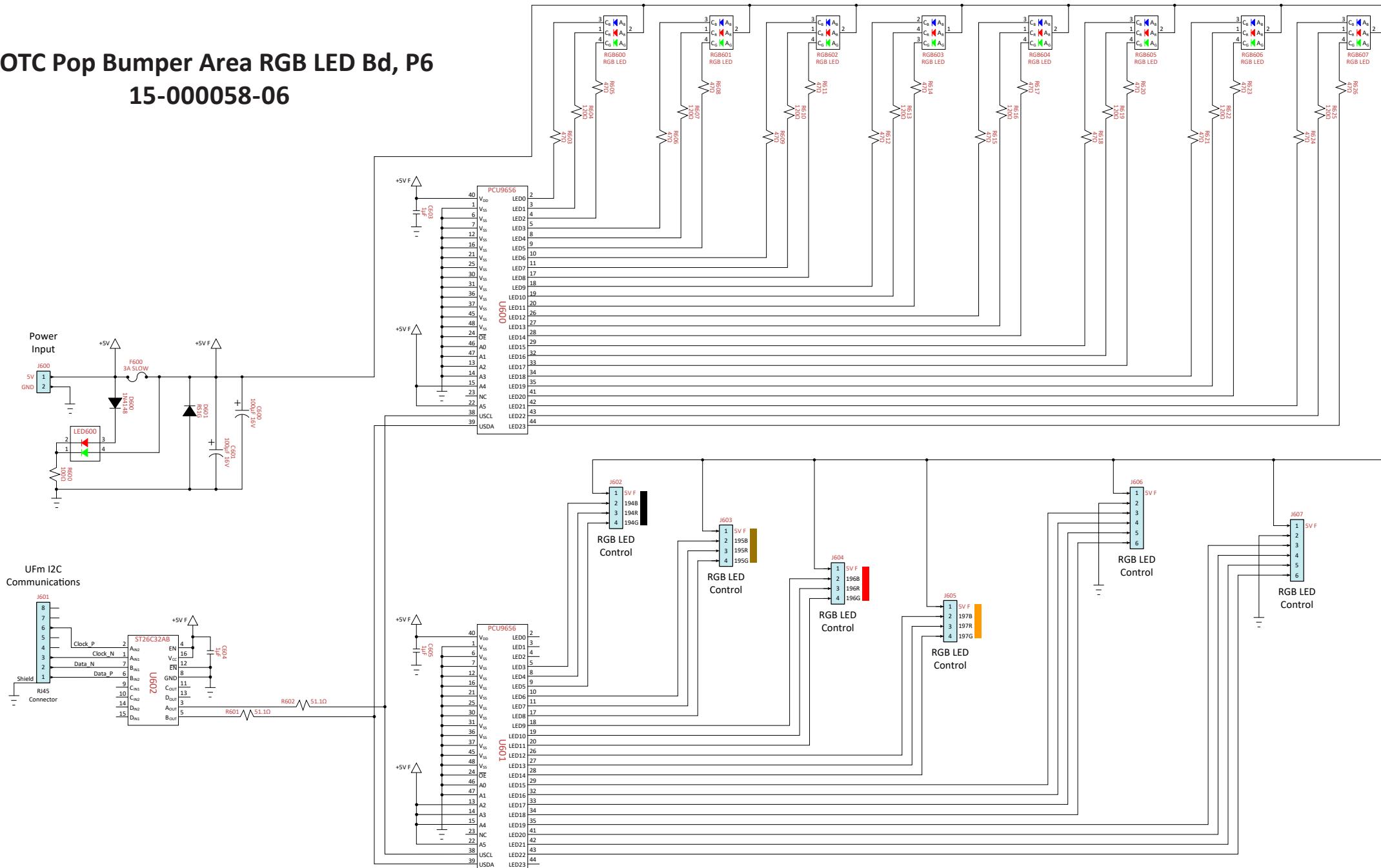
| | | |
|--------|----------|--|
| J503-5 | GRY | +5VDC to GI LED Bd 120, J100-1 |
| J503-6 | GRY-BRN | LED100 return from GI LED Bd 120, J100-2 |
| J503-7 | Not Used | |
| J503-8 | Not Used | |

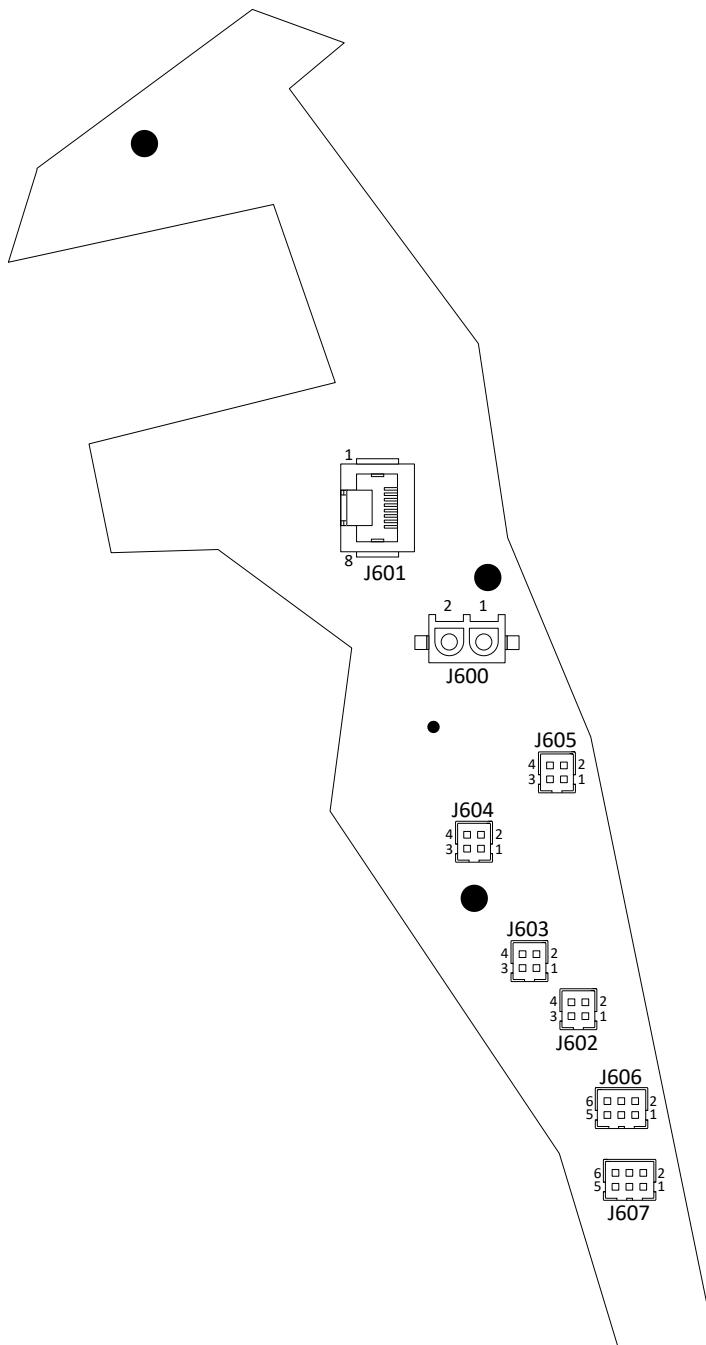


POTC Pop Bumper Area RGB LED Bd, P6 15-000058-06

| Component(s) | Part Number | Description |
|---|--------------|--|
| C600, C601 | 109-100M-016 | Capacitor, Elect (Radial), 100µF, 16V, 20% |
| C603-C505 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% |
| D600 | 110-1001-0S | Diode, 1N4148, SMT, 100V, 300mA |
| D601 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F600 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V |
| LED600 | 24-000024-0S | LED, SMD, Rev Mount, RED/GRN, 631/573nm |
| R600 | 122-0100-104 | Resistor, 0603 SMT, 100Ω, 0.1W, 5% |
| R601, R602 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| R603, R605, R606, R608, R609, R611, R612, R614, R615, R617, R618, R620, R621, R623, R624, R626 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R604, R607, R610, R613, R616, R619, R622, R625 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB600-RGB607 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| U600, U601 | 140-0005-0S | LED Driver, I2C-Bus, 24-Bit, 5MHz, PCU9656, LQFP-48 SMT |
| U602 | 141-0020-0S | Quad Diff Line Rcvr w/3-State Outputs, ST26C32AB, TSSOP-16 SMT |
| J600 | 30-2005-02 | Header, Male, 2-pin, 6.35mm |
| J601 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |
| J602-J605 | 30-2203-04 | Header, Male, 4-Pin, 2 Rows, 2.5mm |
| J606, J607 | 30-2203-06 | Header, Male, 6-Pin, 2 Rows, 2.5mm |

POTC Pop Bumper Area RGB LED Bd, P6
15-000058-06





POTC Pop Bumper Area RGB LED Bd, P6

15-000058-06

Connector Pin-outs

J600 Power Input

J600-1 RED +5VDC from ATX Pwr Supply
J600-2 BLK Ground from ATX Pwr Supply

J606 RGB LED Control

Not Used

J601 UFM I2C Communications

CAT5 or higher Ethernet cable from Left Orbit & Upper Targets RGB LED Bd (P9), J906

J602 RGB LED Control (RGB Cable 19-009038-08)

RGB LED 194 [Upper Pop Bumper]

| | | |
|--------|---------|--|
| J602-1 | BLK | +5VDC to RGB GI Bd 194, J100-1 |
| J602-2 | BLK-BLU | RGB100 BLU return from RGB GI Bd 194, J100-2 |
| J602-3 | BLK-RED | RGB100 RED return from RGB GI Bd 194, J100-3 |
| J602-4 | BLK-GRN | RGB100 GRN return from RGB GI Bd 194, J100-4 |

J603 RGB LED Control (RGB Cable 19-009038-09)

RGB LED 195 [Upper Middle Pop Bumper]

| | | |
|--------|---------|--|
| J603-1 | BRN | +5VDC to RGB GI Bd 195, J100-1 |
| J603-2 | BRN-BLU | RGB100 BLU return from RGB GI Bd 195, J100-2 |
| J603-3 | BRN-RED | RGB100 RED return from RGB GI Bd 195, J100-3 |
| J603-4 | BRN-GRN | RGB100 GRN return from RGB GI Bd 195, J100-4 |

J604 RGB LED Control (RGB Cable 19-009038-10)

RGB LED 196 [Lower Middle Pop Bumper]

| | | |
|--------|---------|--|
| J604-1 | RED | +5VDC to RGB GI Bd 196, J100-1 |
| J604-2 | RED-BLU | RGB100 BLU return from RGB GI Bd 196, J100-2 |
| J604-3 | RED-GRY | RGB100 RED return from RGB GI Bd 196, J100-3 |
| J604-4 | RED-GRN | RGB100 GRN return from RGB GI Bd 196, J100-4 |

J605 RGB LED Control (RGB Cable 19-009038-11)

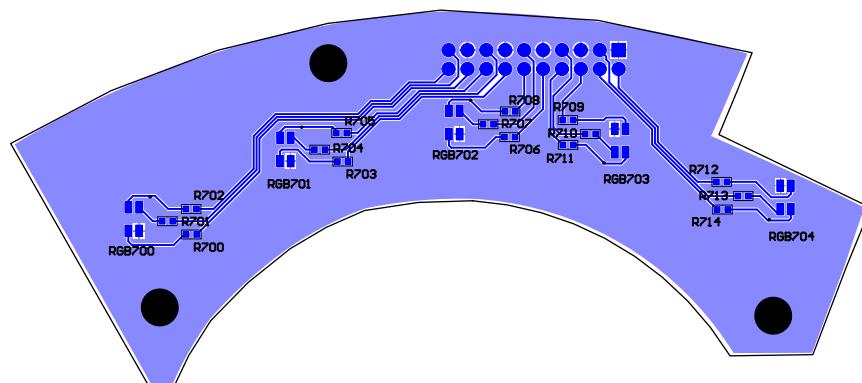
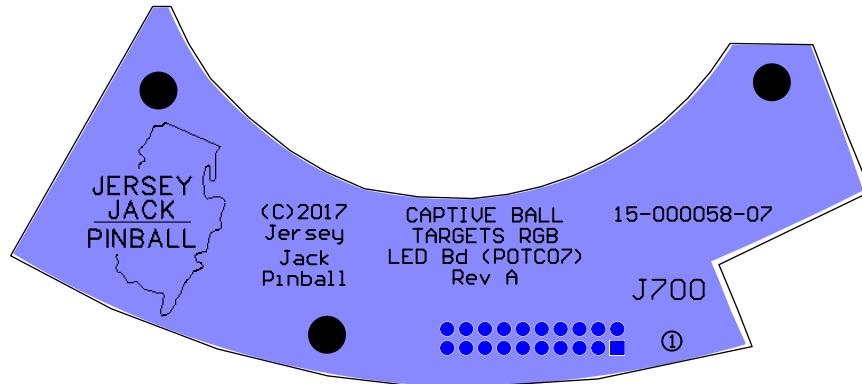
RGB LED 197 [Lower Pop Bumper]

| | | |
|--------|---------|--|
| J605-1 | ORN | +5VDC to RGB GI Bd 197, J100-1 |
| J605-2 | ORN-BLU | RGB100 BLU return from RGB GI Bd 197, J100-2 |
| J605-3 | ORN-RED | RGB100 RED return from RGB GI Bd 197, J100-3 |
| J605-4 | ORN-GRN | RGB100 GRN return from RGB GI Bd 197, J100-4 |

POTC Captive Ball Targets RGB LED Bd, P7

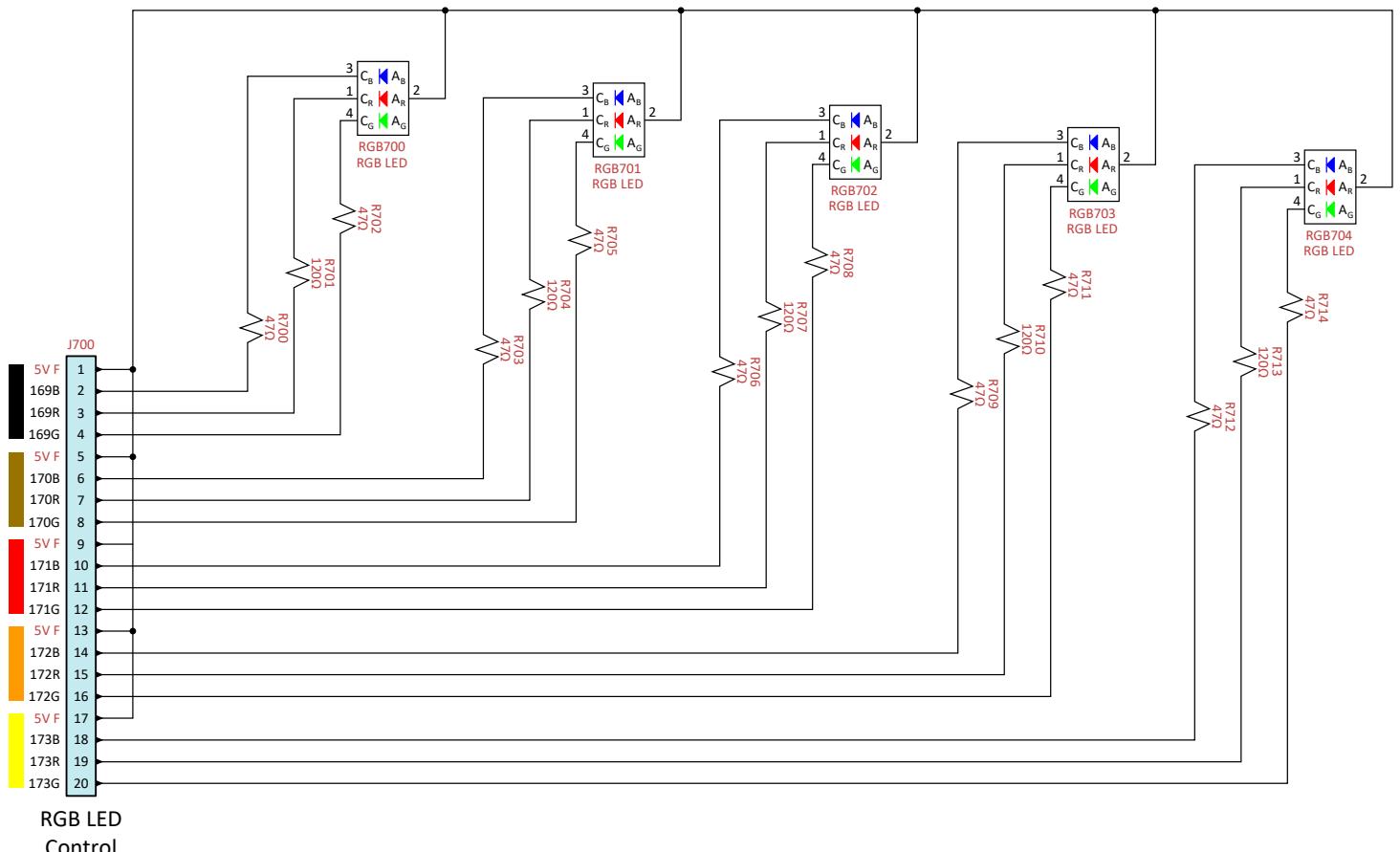
15-000058-07

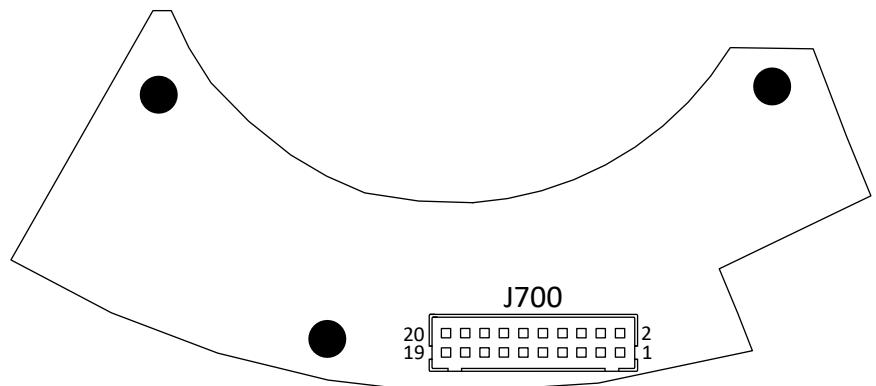
| Component(s) | Part Number | Description |
|---|----------------------------|---|
| R700, R702, R703, R705, R706, R708, R709, R711, R712, R714 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R701, R704, R707, R710, R713 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB700-RGB704 J700 | 24-000027-05 30-2203-20 | LED, SMT, RGB, 622/523/470nm Header, Male, 20-Pin, 2 Rows, 2.5mm |



POTC Captive Ball Targets RGB LED Bd, P7

15-000058-07





POTC Captive Ball Targets RGB LED Bd, P7

15-000058-07

Connector Pin-outs

J700 RGB LED Control/Power Input (RGB Cable 19-009038-01)

RGB LED 169 [Chapter Select #5 (right)]

| | | |
|--------|---------|---|
| J700-1 | BLK | +5VDC from Left Orbit & Upper Targets RGB LED Bd (P9), J909-1 |
| J700-2 | BLK-BLU | RGB700 BLU return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-2 |
| J700-3 | BLK-RED | RGB700 RED return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-3 |
| J700-4 | BLK-GRN | RGB700 GRN return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-4 |

RGB LED 170 [Chapter Select #4]

| | | |
|--------|---------|---|
| J700-5 | BRN | +5VDC from Left Orbit & Upper Targets RGB LED Bd (P9), J909-5 |
| J700-6 | BRN-BLU | RGB701 BLU return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-6 |
| J700-7 | BRN-RED | RGB701 RED return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-7 |
| J700-8 | BRN-GRN | RGB701 GRN return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-8 |

RGB LED 171 [Chapter Select #3]

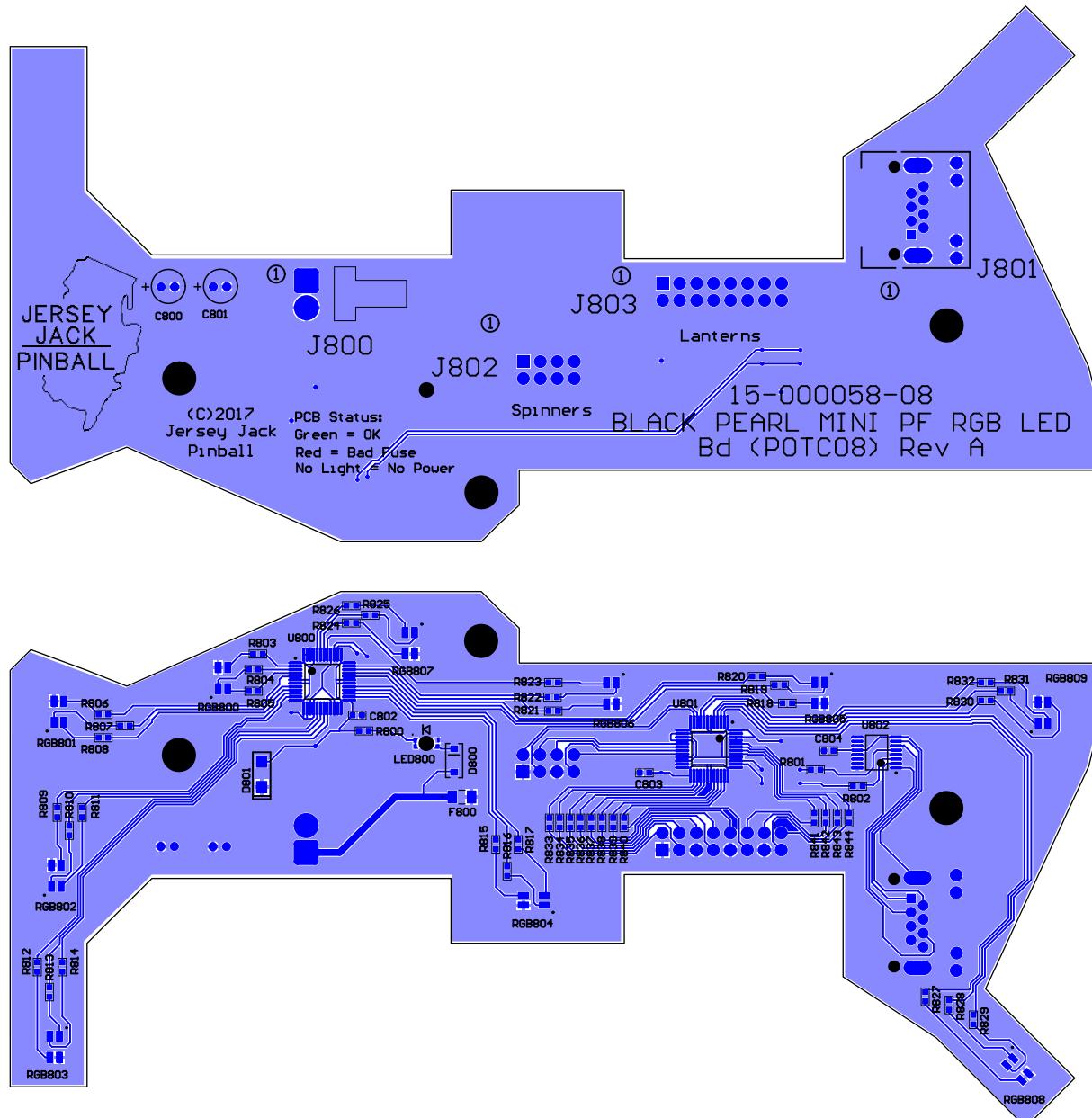
| | | |
|---------|---------|--|
| J700-9 | RED | +5VDC from Left Orbit & Upper Targets RGB LED Bd (P9), J909-9 |
| J700-10 | RED-BLU | RGB702 BLU return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-10 |
| J700-11 | RED-GRY | RGB702 RED return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-11 |
| J700-12 | RED-GRN | RGB702 GRN return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-12 |

RGB LED 172 [Chapter Select #2]

| | | |
|---------|---------|--|
| J700-13 | ORN | +5VDC from Left Orbit & Upper Targets RGB LED Bd (P9), J909-13 |
| J700-14 | ORN-BLU | RGB703 BLU return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-14 |
| J700-15 | ORN-RED | RGB703 RED return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-15 |
| J700-16 | ORN-GRN | RGB703 GRN return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-16 |

RGB LED 173 [Chapter Select #1 (left)]

| | | |
|---------|---------|--|
| J700-17 | YEL | +5VDC from Left Orbit & Upper Targets RGB LED Bd (P9), J909-17 |
| J700-18 | YEL-BLU | RGB704 BLU return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-18 |
| J700-19 | YEL-RED | RGB704 RED return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-19 |
| J700-20 | YEL-GRN | RGB704 GRN return to Left Orbit & Upper Targets RGB LED Bd (P9), J909-20 |

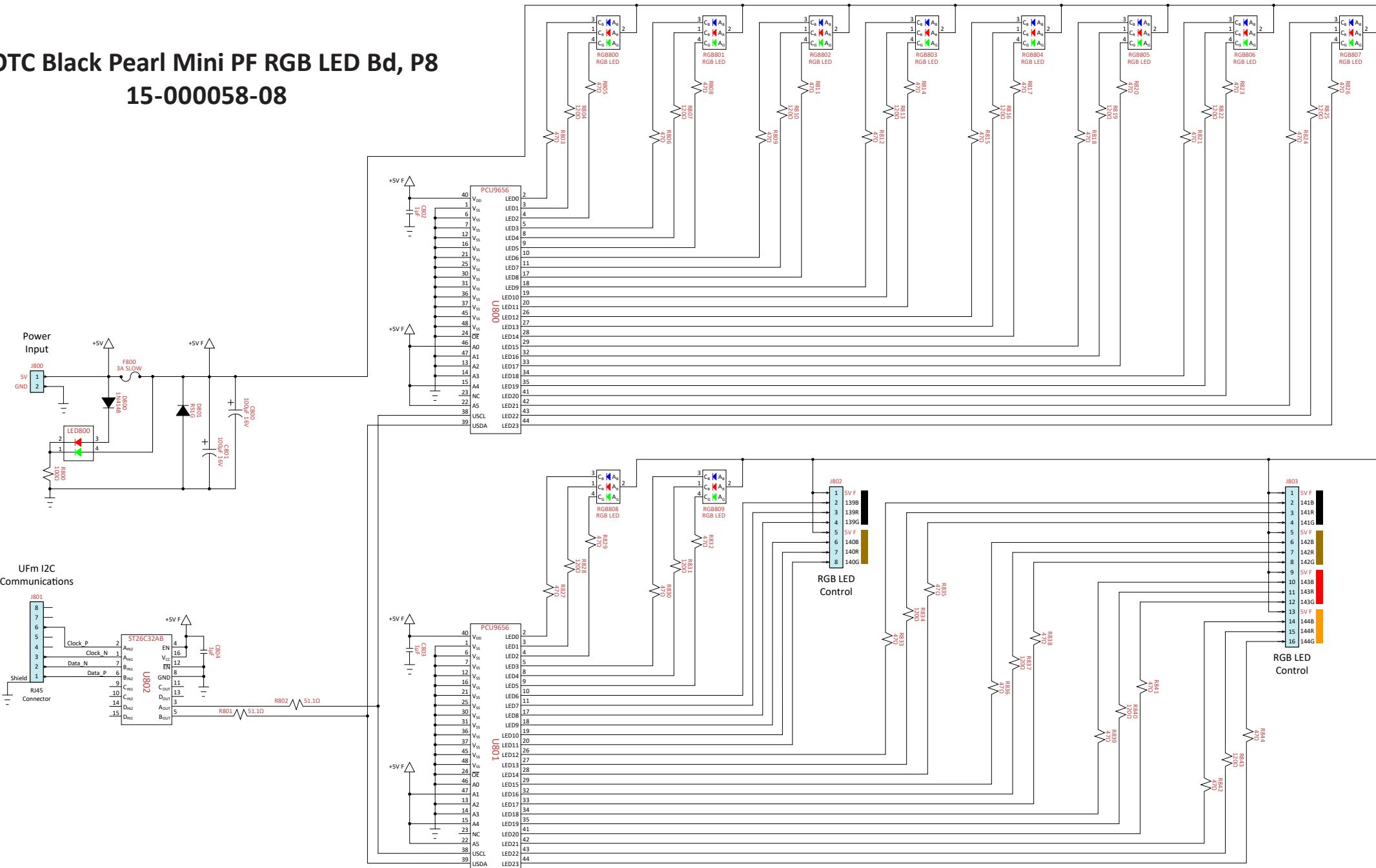


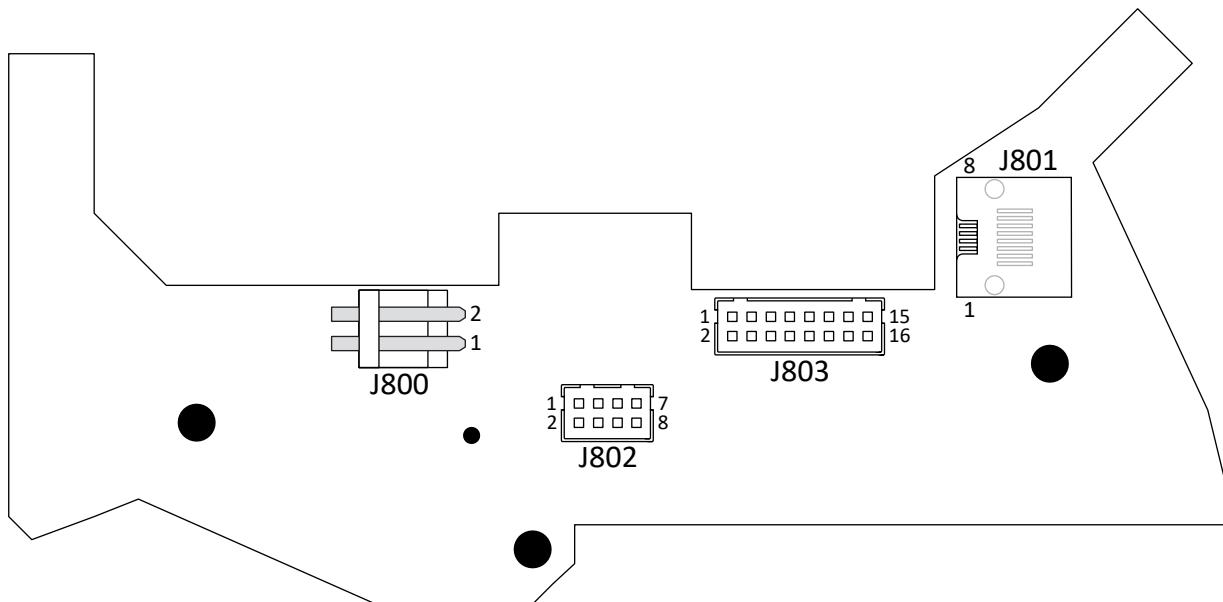
POTC Black Pearl Mini PF RGB LED Bd, P8 15-000058-08

| Component(s) | Part Number | Description |
|---|--------------|--|
| C800, C801 | 109-100M-016 | Capacitor, Elect (Radial), 100µF, 16V, 20% |
| C802-C804 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% |
| D800 | 110-1001-0S | Diode, 1N4148, SMT, 100V, 300mA |
| D801 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F800 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V |
| LED800 | 24-000024-0S | LED, SMD, Rev Mount, RED/GRN, 631/573nm |
| R800 | 122-0100-104 | Resistor, 0603 SMT, 100Ω, 0.1W, 5% |
| R801, R802 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| R803, R805, R806, R808, R809, R811, R812, R814, R815, R817, R818, R820, R821, R823, R824, R826, R827, R829, R830, R832, R833, R835, R836, R838, R839, R841, R842, R844 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R804, R807, R810, R813, R816, R819, R822, R825, R828, R831, R834, R837, R840, R843 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB800-RGB809 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| U800, U801 | 140-0005-0S | LED Driver, I2C-Bus, 24-Bit, 5MHz, PCU9656, LQFP-48 SMT |
| U802 | 141-0020-0S | Quad Diff Line Rcvr w/3-State Outputs, ST26C32AB, TSSOP-16 SMT |
| J800 | 30-2005-02 | Header, Male, 2-pin, 6.35mm |
| J801 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |
| J802 | 30-2203-08 | Header, Male, 8-Pin, 2 Rows, 2.5mm |
| J803 | 30-2203-16 | Header, Male, 16-Pin, 2 Rows, 2.5mm |

POTC Black Pearl Mini PF RGB LED Bd, P8

15-000058-08





POTC Black Pearl Mini PF RGB LED Bd, P8

15-000058-08

Connector Pin-outs

J800 Power Input

- J800-1 RED +5VDC from ATX Pwr Supply
- J800-2 BLK Ground from ATX Pwr Supply

J801 UFM I2C Communications

CAT5 or higher Ethernet cable from Left Orbit & Upper Targets RGB LED Bd (P9), J908

J802 RGB LED Control (RGB Cable 19-009038-04)

RGB LED 139 [Black Pearl Left RGB Spinner]

| | | |
|--------|---------|--|
| J802-1 | BLK | +5VDC to RGB GI Bd 139, J100-1 |
| J802-2 | BLK-BLU | RGB100 BLU return from RGB GI Bd 139, J100-2 |
| J802-3 | BLK-RED | RGB100 RED return from RGB GI Bd 139, J100-3 |
| J802-4 | BLK-GRN | RGB100 GRN return from RGB GI Bd 139, J100-4 |

RGB LED 140 [Black Pearl Right RGB Spinner]

| | | |
|--------|---------|--|
| J802-5 | BRN | +5VDC to RGB GI Bd 140, J100-1 |
| J802-6 | BRN-BLU | RGB100 BLU return from RGB GI Bd 140, J100-2 |
| J802-7 | BRN-RED | RGB100 RED return from RGB GI Bd 140, J100-3 |
| J802-8 | BRN-GRN | RGB100 GRN return from RGB GI Bd 140, J100-4 |

J803 RGB LED Control (RGB Cable 19-009038-13)

RGB LED 141 [Left Inner Black Pearl Lantern]

| | | |
|--------|---------|--|
| J803-1 | BLK | +5VDC to lantern RGB LED 141 |
| J803-2 | BLK-BLU | RGB100 BLU return from lantern RGB LED 141 |
| J803-3 | BLK-RED | RGB100 RED return from lantern RGB LED 141 |
| J803-4 | BLK-GRN | RGB100 GRN return from lantern RGB LED 141 |

RGB LED 142 [Right Inner Black Pearl Lantern]

| | | |
|--------|---------|--|
| J803-5 | BRN | +5VDC to lantern RGB LED 142 |
| J803-6 | BRN-BLU | RGB100 BLU return from lantern RGB LED 142 |
| J803-7 | BRN-RED | RGB100 RED return from lantern RGB LED 142 |
| J803-8 | BRN-GRN | RGB100 GRN return from lantern RGB LED 142 |

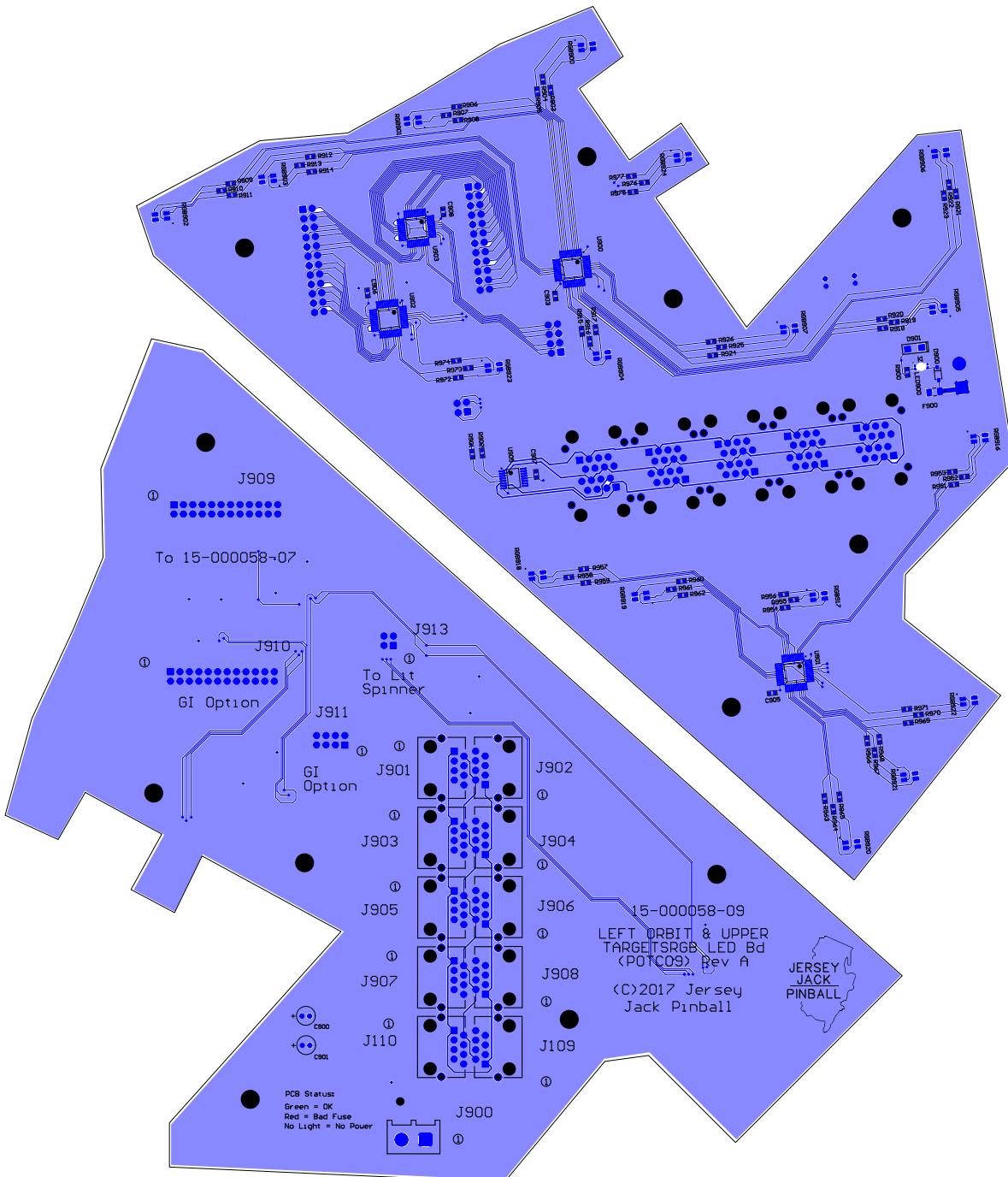
RGB LED 143 [Left Outer Black Pearl Lantern]

| | | |
|---------|---------|--|
| J803-9 | RED | +5VDC to lantern RGB LED 143 |
| J803-10 | RED-BLU | RGB100 BLU return from lantern RGB LED 143 |
| J803-11 | RED-GRY | RGB100 RED return from lantern RGB LED 143 |
| J803-12 | RED-GRN | RGB100 GRN return from lantern RGB LED 143 |

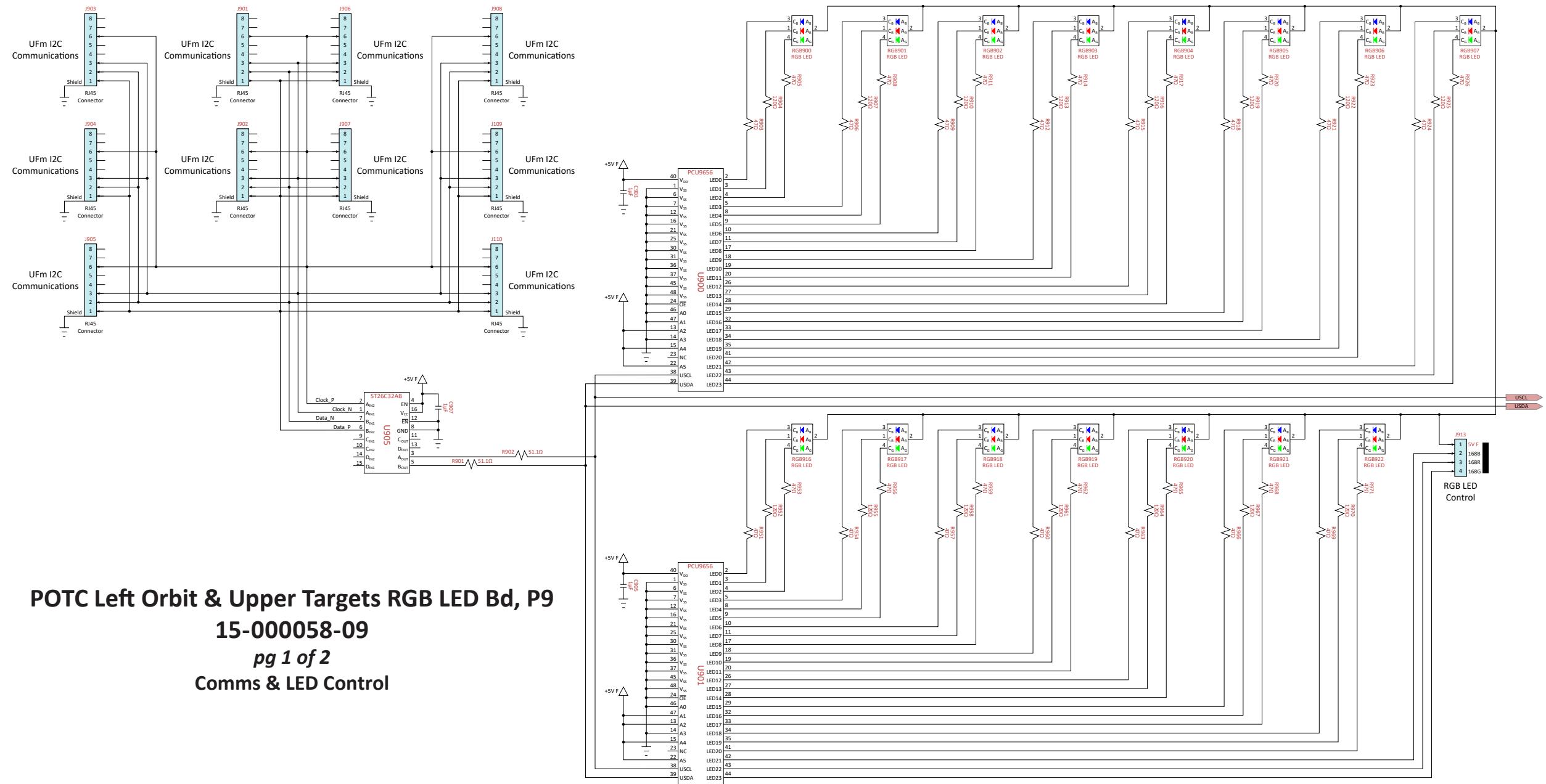
RGB LED 144 [Right Outer Black Pearl Lantern]

| | | |
|---------|---------|--|
| J803-13 | ORN | +5VDC to lantern RGB LED 144 |
| J803-14 | ORN-BLU | RGB100 BLU return from lantern RGB LED 144 |
| J803-15 | ORN-RED | RGB100 RED return from lantern RGB LED 144 |
| J803-16 | ORN-GRN | RGB100 GRN return from lantern RGB LED 144 |

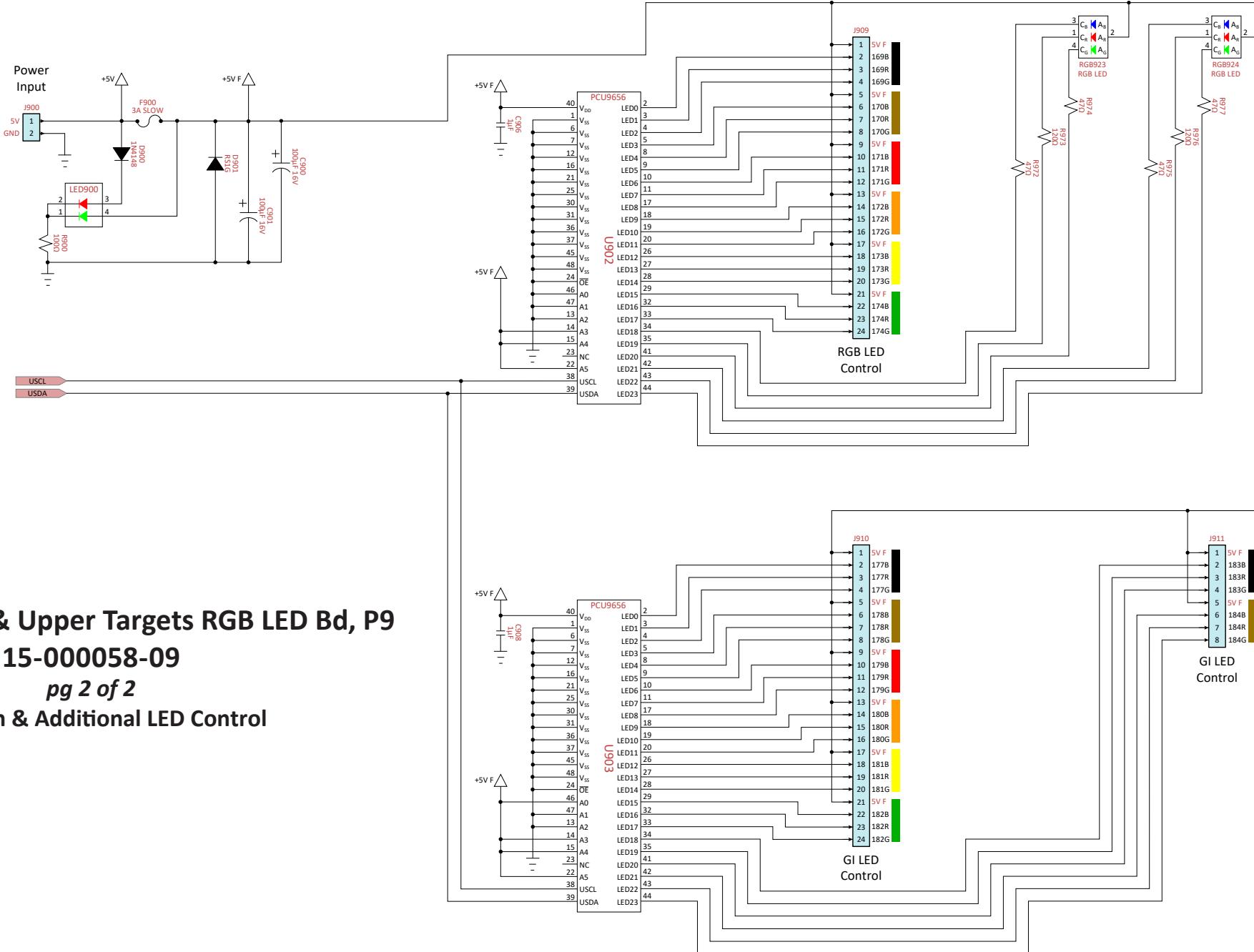
POTC Left Orbit & Upper Targets RGB LED Bd, P9
15-000058-09

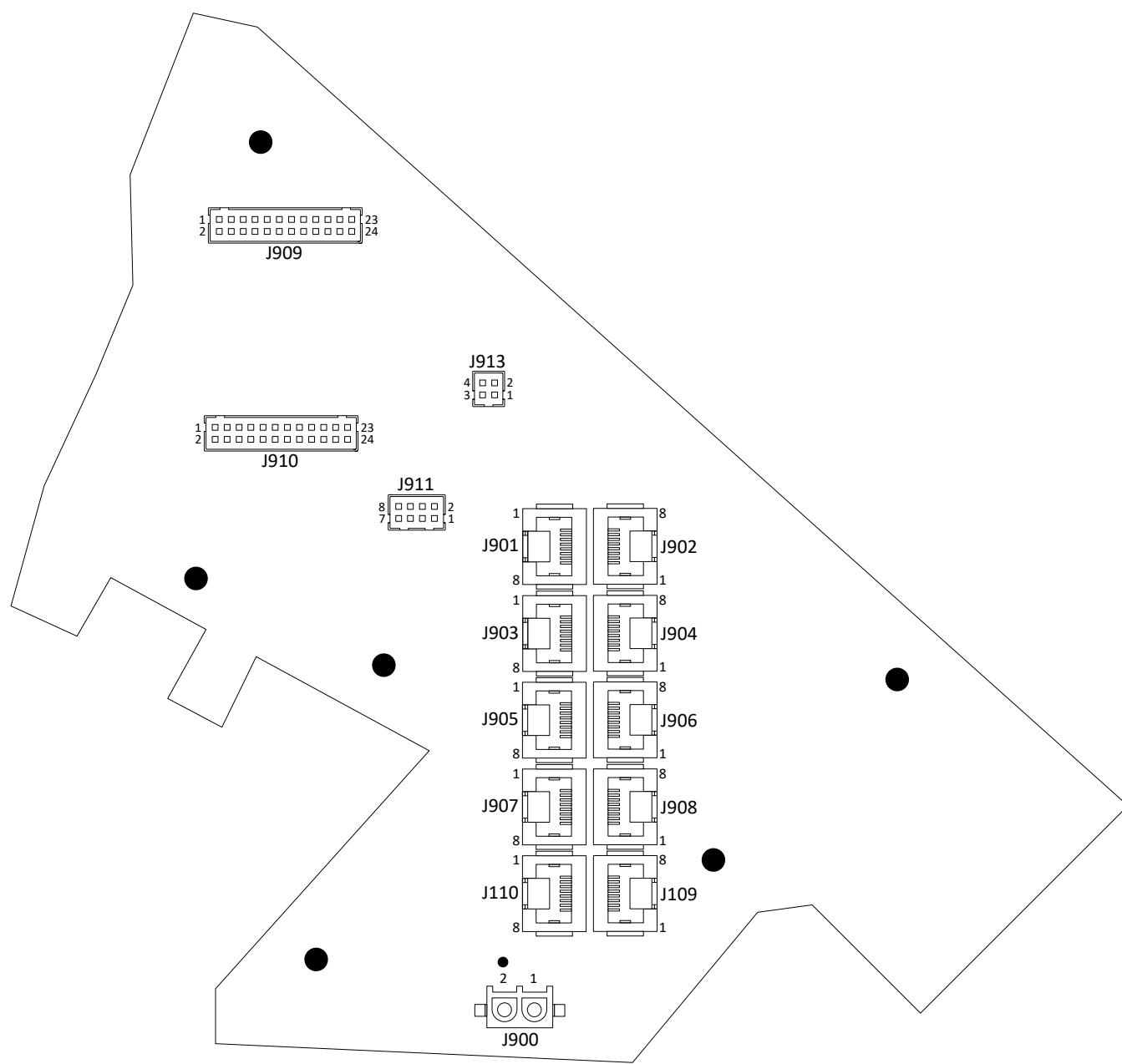


| Component(s) | Part Number | Description |
|---|--------------|--|
| C900, C901 | 109-100M-016 | Capacitor, Elect (Radial), 100µF, 16V, 20% |
| C903, C905-C908 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% |
| D900 | 110-1001-0S | Diode, 1N4148, SMT, 100V, 300mA |
| D901 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F900 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V |
| LED900 | 24-000024-0S | LED, SMD, Rev Mount, RED/GRN, 631/573nm |
| R900 | 122-0100-104 | Resistor, 0603 SMT, 100Ω, 0.1W, 5% |
| R901, R902 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| R903, R905, R906, R908, R909, R911, R912, R914, R915, R917, R918, R920, R921, R923, R924, R926, R951, R953, R954, R956, R957, R959, R960, R962, R963, R965, R966, R968, R969, R971, R972, R974, R975, R977 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R904, R907, R910, R913, R916, R919, R922, R925, R952, R955, R958, R961, R964, R967, R970, R973, R976 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB900-RGB907, RGB916-RGB924 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| U900-U903 | 140-0005-0S | LED Driver, I2C-Bus, 24-Bit, 5MHz, PCU9656, LQFP-48 SMT |
| U905 | 141-0020-0S | Quad Diff Line Rcvr w/3-State Outputs, ST26C32AB, TSSOP-16 SMT |
| J900 | 30-2005-02 | Header, Male, 2-pin, 6.35mm |
| J109, J110, J901-J908 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |
| J909, J910 | 30-2203-24 | Header, Male, 24-Pin, 2 Rows, 2.5mm |
| J911 | 30-2203-08 | Header, Male, 8-Pin, 2 Rows, 2.5mm |
| J913 | 30-2203-04 | Header, Male, 4-Pin, 2 Rows, 2.5mm |



POTC Left Orbit & Upper Targets RGB LED Bd, P9
15-000058-09
pg 2 of 2
Power In & Additional LED Control





POTC Left Orbit & Upper Targets RGB LED Bd, P9

15-000058-09

Connector Pin-outs

J900 Power Input

J900-1 RED +5VDC from ATX Pwr Supply
J900-2 BLK Ground from ATX Pwr Supply

J901 UFM I2C Communications

CAT5 or higher Ethernet cable to Subway Entrance/Inner Orbit RGB LED Bd (P1), J101

J902 UFM I2C Communications

CAT5 or higher Ethernet cable to Mode & Multiball RGB LED Bd (P2), J201

J903 UFM I2C Communications

CAT5 or higher Ethernet cable to Left Ramp & Turnaround Loop RGB LED Bd (P3), J301

J904 UFM I2C Communications

Not Used

J905 UFM I2C Communications

CAT5 or higher Ethernet cable to Right Ramp & VUK RGB LED Bd (P5), J501

J906 UFM I2C Communications

CAT5 or higher Ethernet cable to Pop Bumper Area RGB LED Bd (P6), J601

J907 UFM I2C Communications

Not Used

J908 UFM I2C Communications

CAT5 or higher Ethernet cable to Black Pearl Mini PF RGB LED Bd (P8), J801

J109 UFM I2C Communications

CAT5 or higher Ethernet cable to Back Panel Starfield Bd, J101 (LE & CE games only)

J110 UFM I2C Communications

CAT5 or higher Ethernet cable from BAG Controller Bd, J103

J909 RGB LED Control (RGB Cables 19-009038-01 & 19-009038-07)

RGB LED 169 [Chapter Select #5 (right)]

| | | | |
|--------|---|---------|---|
| J909-1 |  | BLK | +5VDC to Captive Ball Targets RGB LED Bd (P7), J700-1 |
| J909-2 |  | BLK-BLU | RGB700 BLU return from Captive Ball Targets RGB LED Bd (P7), J700-2 |
| J909-3 |  | BLK-RED | RGB700 RED return from Captive Ball Targets RGB LED Bd (P7), J700-3 |
| J909-4 |  | BLK-GRN | RGB700 GRN return from Captive Ball Targets RGB LED Bd (P7), J700-4 |

RGB LED 170 [Chapter Select #4]

| | | | |
|--------|---|---------|---|
| J909-5 |  | BRN | +5VDC to Captive Ball Targets RGB LED Bd (P7), J700-5 |
| J909-6 |  | BRN-BLU | RGB701 BLU return from Captive Ball Targets RGB LED Bd (P7), J700-6 |
| J909-7 |  | BRN-RED | RGB701 RED return from Captive Ball Targets RGB LED Bd (P7), J700-7 |
| J909-8 |  | BRN-GRN | RGB701 GRN return from Captive Ball Targets RGB LED Bd (P7), J700-8 |

RGB LED 171 [Chapter Select #3]

| | | | |
|---------|---|---------|--|
| J909-9 |  | RED | +5VDC to Captive Ball Targets RGB LED Bd (P7), J700-9 |
| J909-10 |  | RED-BLU | RGB702 BLU return from Captive Ball Targets RGB LED Bd (P7), J700-10 |
| J909-11 |  | RED-GRY | RGB702 RED return from Captive Ball Targets RGB LED Bd (P7), J700-11 |
| J909-12 |  | RED-GRN | RGB702 GRN return from Captive Ball Targets RGB LED Bd (P7), J700-12 |

RGB LED 172 [Chapter Select #2]

| | | | |
|---------|---|---------|--|
| J909-13 |  | ORN | +5VDC to Captive Ball Targets RGB LED Bd (P7), J700-13 |
| J909-14 |  | ORN-BLU | RGB703 BLU return from Captive Ball Targets RGB LED Bd (P7), J700-14 |
| J909-15 |  | ORN-RED | RGB703 RED return from Captive Ball Targets RGB LED Bd (P7), J700-15 |
| J909-16 |  | ORN-GRN | RGB703 GRN return from Captive Ball Targets RGB LED Bd (P7), J700-16 |

RGB LED 173 [Chapter Select #1 (left)]

| | | | |
|---------|--|---------|--|
| J909-17 |  | YEL | +5VDC to Captive Ball Targets RGB LED Bd (P7), J700-17 |
| J909-18 |  | YEL-BLU | RGB704 BLU return from Captive Ball Targets RGB LED Bd (P7), J700-18 |
| J909-19 |  | YEL-RED | RGB704 RED return from Captive Ball Targets RGB LED Bd (P7), J700-19 |
| J909-20 |  | YEL-GRN | RGB704 GRN return from Captive Ball Targets RGB LED Bd (P7), J700-20 |

RGB LED 174 [Treasure Chest Inside] (RGB Cable 19-009038-07)

| | | | |
|---------|---|---------|--|
| J909-21 |  | GRN | +5VDC from RGB GI Bd 174, J100-1 |
| J909-22 |  | GRN-BLU | RGB100 BLU return from RGB GI Bd 174, J100-2 |
| J909-23 |  | GRN-RED | RGB100 RED return from RGB GI Bd 174, J100-3 |
| J909-24 |  | GRN-GRY | RGB100 GRN return from RGB GI Bd 174, J100-4 |

J910 GI LED Control (RGB GI Cable 19-003125-12, LE & CE Games)

GI LED 177 [Left Orbit Enter Low]

| | | | |
|--------|---|---------|--|
| J910-1 |  | BLK | +5VDC to RGB GI Bd 177, J100-1 |
| J910-2 |  | BLK-BLU | RGB100 BLU return from RGB GI Bd 177, J100-2 |
| J910-3 |  | BLK-RED | RGB100 RED return from RGB GI Bd 177, J100-3 |
| J910-4 |  | BLK-GRN | RGB100 GRN return from RGB GI Bd 177, J100-4 |

GI LED 178 [Left Orbit Enter High]

| | | | |
|--------|---|---------|--|
| J910-5 |  | BRN | +5VDC to RGB GI Bd 178, J100-1 |
| J910-6 |  | BRN-BLU | RGB100 BLU return from RGB GI Bd 178, J100-2 |
| J910-7 |  | BRN-RED | RGB100 RED return from RGB GI Bd 178, J100-3 |
| J910-8 |  | BRN-GRN | RGB100 GRN return from RGB GI Bd 178, J100-4 |

GI LED 179 [Treasure Chest Left]

| | | | |
|---------|---|---------|--|
| J910-9 |  | RED | +5VDC to RGB GI Bd 179, J100-1 |
| J910-10 |  | RED-BLU | RGB100 BLU return from RGB GI Bd 179, J100-2 |
| J910-11 |  | RED-GRY | RGB100 RED return from RGB GI Bd 179, J100-3 |
| J910-12 |  | RED-GRN | RGB100 GRN return from RGB GI Bd 179, J100-4 |

GI LED 180 [Treasure Chest Top]

| | | | |
|---------|---|---------|--|
| J910-13 |  | ORN | +5VDC to RGB GI Bd 180, J100-1 |
| J910-14 |  | ORN-BLU | RGB100 BLU return from RGB GI Bd 180, J100-2 |
| J910-15 |  | ORN-RED | RGB100 RED return from RGB GI Bd 180, J100-3 |
| J910-16 |  | ORN-GRN | RGB100 GRN return from RGB GI Bd 180, J100-4 |

GI LED 181 [Treasure Chest Right]

| | | | |
|---------|---|---------|--|
| J910-17 |  | YEL | +5VDC to RGB GI Bd 181, J100-1 |
| J910-18 |  | YEL-BLU | RGB100 BLU return from RGB GI Bd 181, J100-2 |
| J910-19 |  | YEL-RED | RGB100 RED return from RGB GI Bd 181, J100-3 |
| J910-20 |  | YEL-GRN | RGB100 GRN return from RGB GI Bd 181, J100-4 |

GI LED 182 [Left Turnaround Loop Entrance]

| | | | |
|---------|--|---------|--|
| J910-21 |  | GRN | +5VDC to RGB GI Bd 182, J100-1 |
| J910-22 |  | GRN-BLU | RGB100 BLU return from RGB GI Bd 182, J100-2 |
| J910-23 |  | GRN-RED | RGB100 RED return from RGB GI Bd 182, J100-3 |
| J910-24 |  | GRN-GRY | RGB100 GRN return from RGB GI Bd 182, J100-4 |

J910 GI LED Control (GI Cable 19-003125-02, Std Games)

GI LED 177 [Left Orbit Enter Low]

| | | | |
|--------|---|----------|--|
| J910-1 |  | GRY | +5VDC to GI LED Bd 177, J100-1 |
| J910-2 |  | GRY-BLK | LED100 return from GI LED Bd 177, J100-2 |
| J910-3 | | Not Used | |
| J910-4 | | Not Used | |

GI LED 178 [Left Orbit Enter High]

| | | | |
|--------|---|----------|--|
| J910-5 |  | GRY | +5VDC to GI LED Bd 178, J100-1 |
| J910-6 |  | GRY-BRN | LED100 return from GI LED Bd 178, J100-2 |
| J910-7 | | Not Used | |
| J910-8 | | Not Used | |

GI LED 179 [Treasure Chest Left]

| | | | |
|---------|---|----------|--|
| J910-9 |  | GRY | +5VDC to GI LED Bd 179, J100-1 |
| J910-10 |  | GRY-RED | LED100 return from GI LED Bd 179, J100-2 |
| J910-11 | | Not Used | |
| J910-12 | | Not Used | |

GI LED 180 [Treasure Chest Top]

| | | | |
|---------|---|----------|--|
| J910-13 |  | GRY | +5VDC to GI LED Bd 180, J100-1 |
| J910-14 |  | GRY-ORN | LED100 return from GI LED Bd 180, J100-2 |
| J910-15 | | Not Used | |
| J910-16 | | Not Used | |

GI LED 181 [Treasure Chest Right]

| | | | |
|---------|---|----------|--|
| J910-17 |  | GRY | +5VDC to GI LED Bd 181, J100-1 |
| J910-18 |  | GRY-YEL | LED100 return from GI LED Bd 181, J100-2 |
| J910-19 | | Not Used | |
| J910-20 | | Not Used | |

GI LED 182 [Left Turnaround Loop Entrance]

| | | | |
|---------|---|----------|--|
| J910-21 |  | GRY | +5VDC to GI LED Bd 182, J100-1 |
| J910-22 |  | GRY-GRN | LED100 return from GI LED Bd 182, J100-2 |
| J910-23 | | Not Used | |
| J910-24 | | Not Used | |

J911 GI LED Control (RGB GI Cable 19-003125-14, LE & CE Games)***GI LED 183 [Chapter Select Right High]***

| | | | |
|--------|---|---------|--|
| J911-1 |  | BLK | +5VDC to RGB GI Bd 183, J100-1 |
| J911-2 |  | BLK-BLU | RGB100 BLU return from RGB GI Bd 183, J100-2 |
| J911-3 |  | BLK-RED | RGB100 RED return from RGB GI Bd 183, J100-3 |
| J911-4 |  | BLK-GRN | RGB100 GRN return from RGB GI Bd 183, J100-4 |

GI LED 184 [Chapter Select Right Low]

| | | | |
|--------|---|---------|--|
| J911-5 |  | BRN | +5VDC to RGB GI Bd 184, J100-1 |
| J911-6 |  | BRN-BLU | RGB100 BLU return from RGB GI Bd 184, J100-2 |
| J911-7 |  | BRN-RED | RGB100 RED return from RGB GI Bd 184, J100-3 |
| J911-8 |  | BRN-GRN | RGB100 GRN return from RGB GI Bd 184, J100-4 |

J911 GI LED Control (GI Cable 19-003125-04, Std Games)

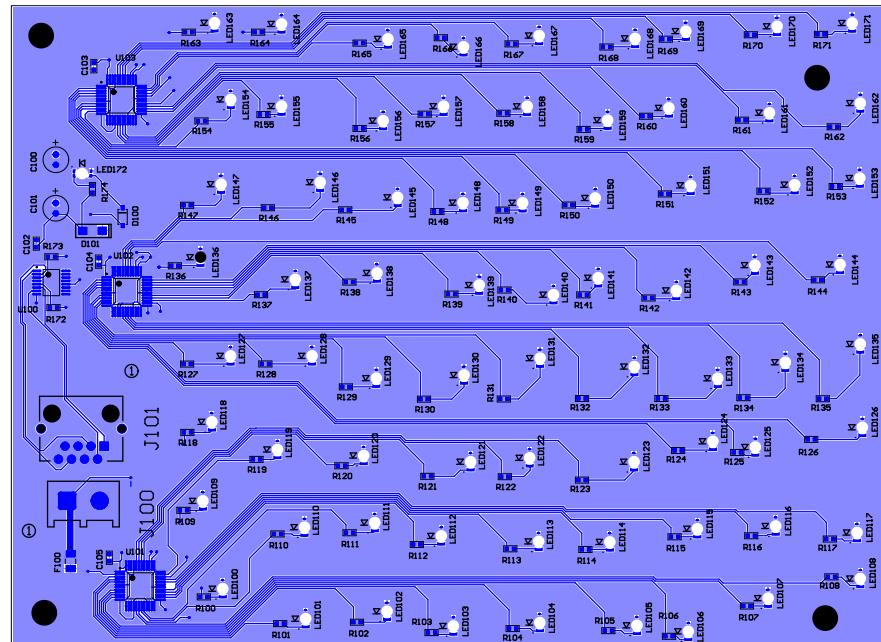
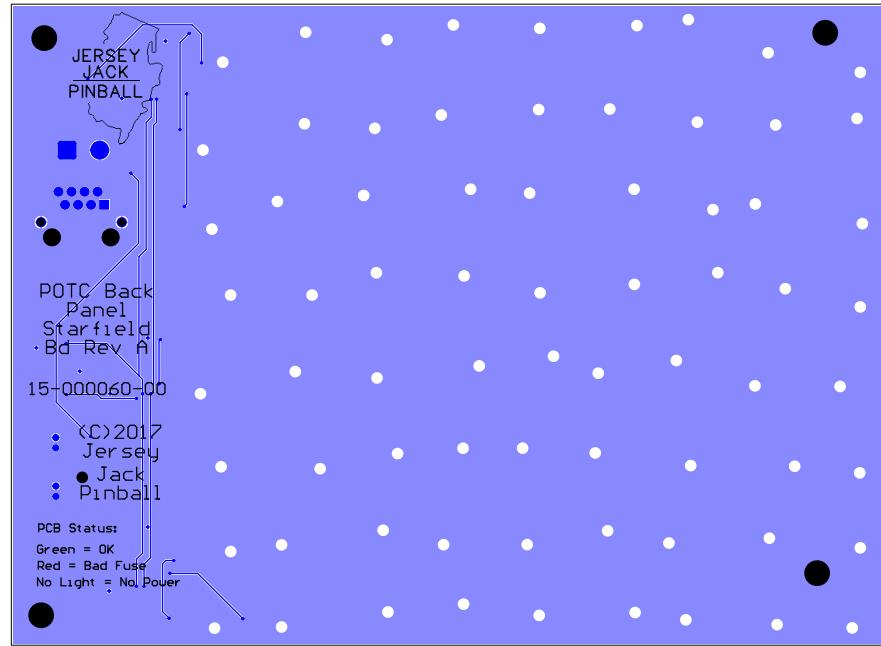
| | | | |
|--------|---|----------|--|
| J911-1 |  | GRY | +5VDC to GI LED Bd 183, J100-1 |
| J911-2 |  | GRY-BLK | LED100 return from GI LED Bd 183, J100-2 |
| J911-3 | | Not Used | |
| J911-4 | | Not Used | |

GI LED 184 [Chapter Select Right Low]

| | | | |
|--------|---|----------|--|
| J911-5 |  | GRY | +5VDC to GI LED Bd 184, J100-1 |
| J911-6 |  | GRY-BRN | LED100 return from GI LED Bd 184, J100-2 |
| J911-7 | | Not Used | |
| J911-8 | | Not Used | |

J913 RGB LED Control (RGB Cable 19-009038-03)

| | | | |
|--|---|---------|--|
| RGB LED 168 [Devil's Triangle RGB Spinner] | | | |
| J913-1 |  | BLK | +5VDC to RGB GI Bd 168, J100-1 |
| J913-2 |  | BLK-BLU | RGB100 BLU return from RGB GI Bd 168, J100-2 |
| J913-3 |  | BLK-RED | RGB100 RED return from RGB GI Bd 168, J100-3 |
| J913-4 |  | BLK-GRN | RGB100 GRN return from RGB GI Bd 168, J100-4 |



POTC Back Panel Starfield Bd*

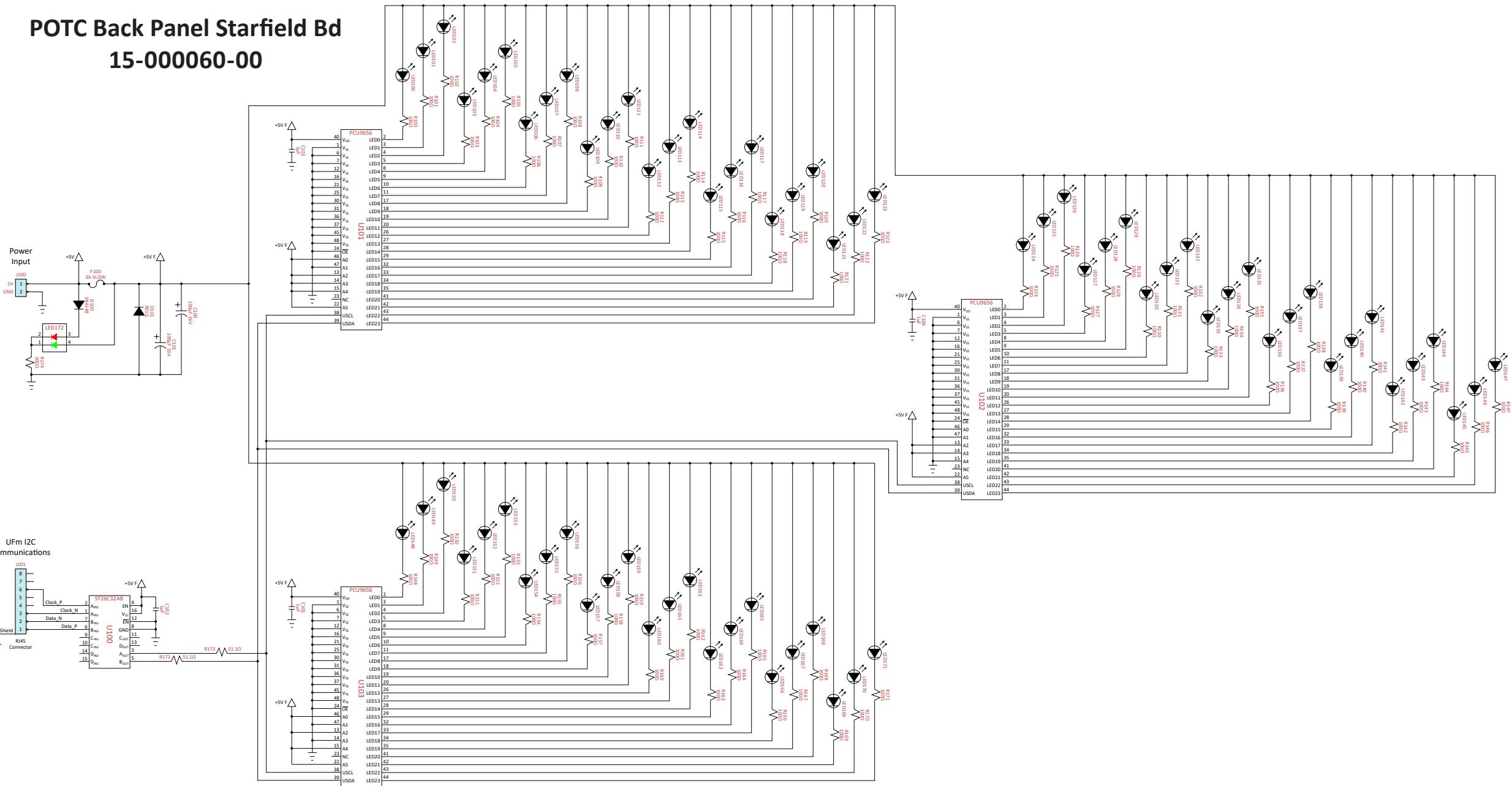
15-000060-00

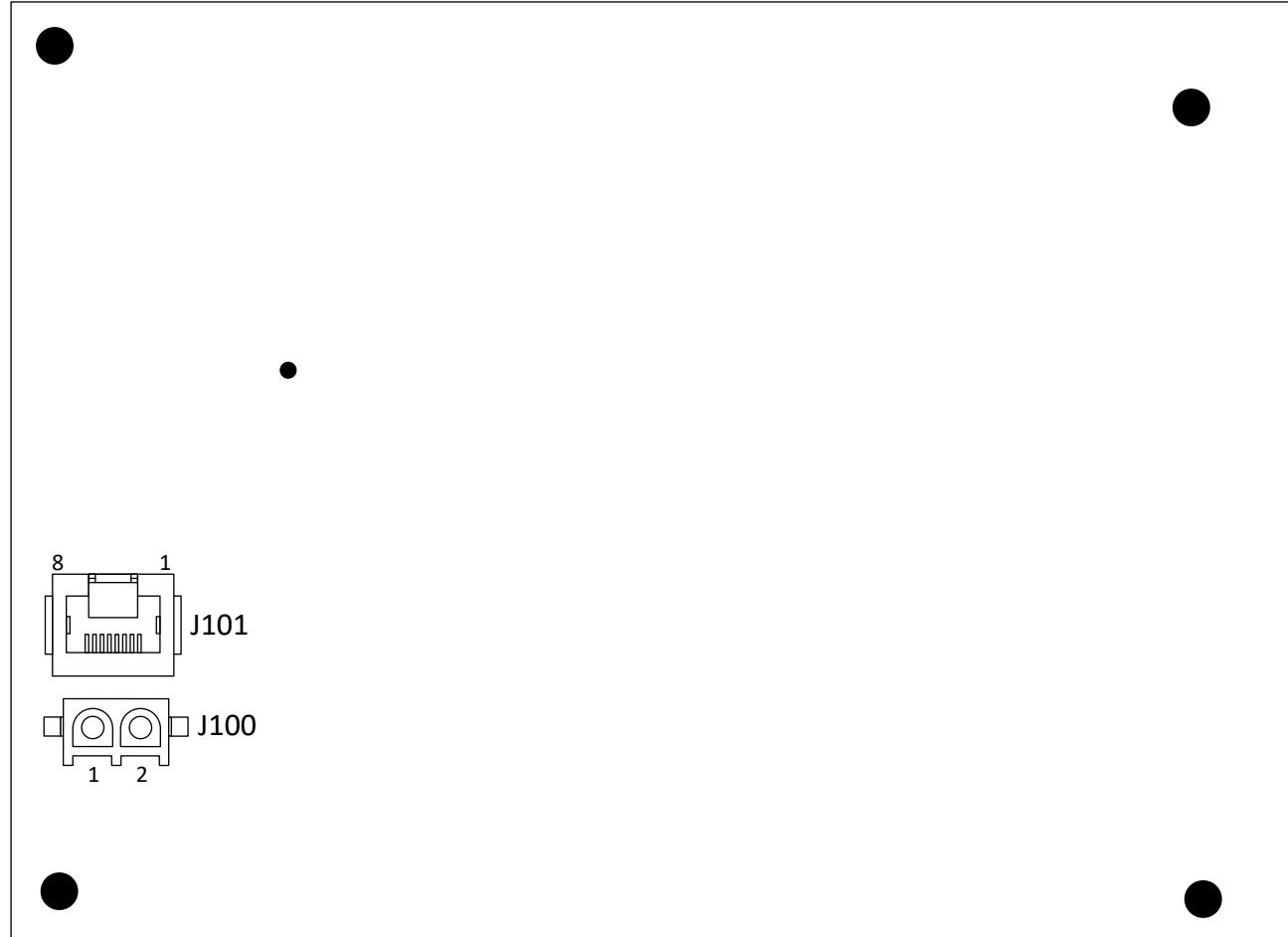
| Component(s) | Part Number | Description |
|-----------------|--------------|--|
| C100, C101 | 109-100M-016 | Capacitor, Elect (Radial), 100µF, 16V, 20% |
| C102-C105 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% |
| D100 | 110-1001-0S | Diode, 1N4148, SMT, 100V, 300mA |
| D101 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| F100 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V |
| LED100-LED171 | 24-000033-0S | LED, SMT, Rev Mnt, Cool White |
| LED172 | 24-000024-0S | LED, SMD, Rev Mount, RED/GRN, 631/573nm |
| R100-R171, R174 | 122-0100-104 | Resistor, 0603 SMT, 100Ω, 0.1W, 5% |
| R172, R173 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| U100 | 141-0020-0S | Quad Diff Line Rcvr w/3-State Outputs, ST26C32AB, TSSOP-16 SMT |
| U101-U103 | 140-0005-0S | LED Driver, I2C-Bus, 24-Bit, 5MHz, PCU9656, LQFP-48 SMT |
| J100 | 30-2005-02 | Header, Male, 2-pin, 6.35mm |
| J101 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |

*LE & CE games only

POTC Back Panel Starfield Bd

15-000060-00





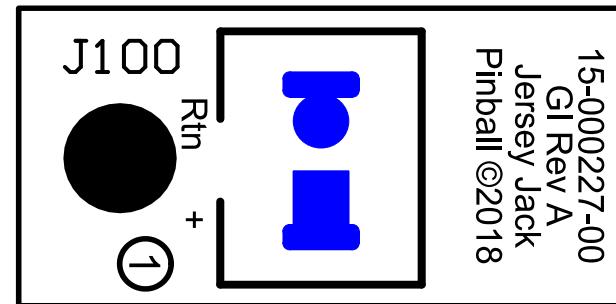
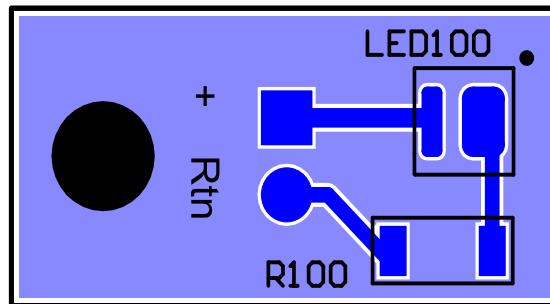
POTC Back Panel Starfield Bd
15-000060-00
Connector Pin-outs

J100 Power Input

J100-1 RED +5VDC from ATX Pwr Supply
J100-2 BLK Ground from ATX Pwr Supply

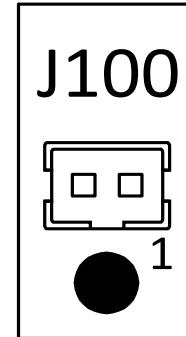
J101 UFM I2C Communications

CAT5 or higher Ethernet cable from Left Orbit & Upper Targets RGB LED Bd (P9), J109



GI LED PCB Assy, T/R LED FP, 5V, Straight Connector
15-004227-05

| Component(s) | Part Number | Description |
|--------------|--------------|--|
| BARE PCB | 15-000227-00 | GI LED Bd, T LED FP, 5V |
| R100 | 124-0047-254 | Resistor, 1206 SMT, 47Ω, 0.25W, 5% |
| LED100 | 24-0029-05 | LED, SMT High-Power, Cool White, 6500K |
| J100 | 30-2202-02 | Header, Male, 2-Pin, 2.5mm |

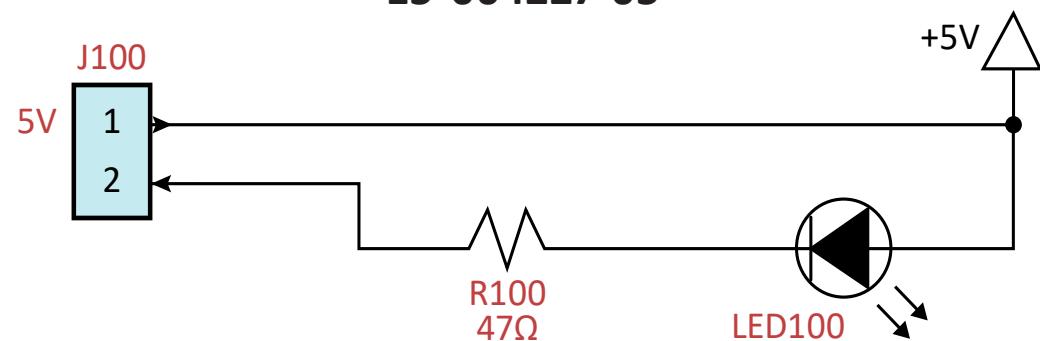


GI LED PCB Assy, T/R LED FP, 5V, Straight Connector
15-004227-05
Connector Pin-outs

J100 LED Control/Power Input

| | | |
|--------|---------|--|
| J100-1 | GRY | +5VDC from a main RGB LED bd (P1-P9) |
| J100-2 | GRY-XXX | LED100 return to a main RGB LED bd (P1-P9) |

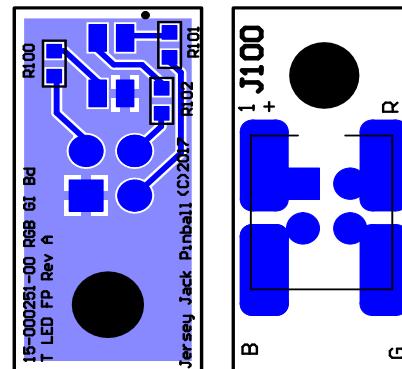
GI LED PCB Assy, T/R LED FP, 5V, Straight Connector
15-004227-05



Note: XXX specifies the color of the stripe on the second wire (BLK, BRN, RED ORN, YEL, GRN, BLU or VIO).

RGB GI PCB Assy, T LED FP, 5V, Straight Connector 15-004251-05

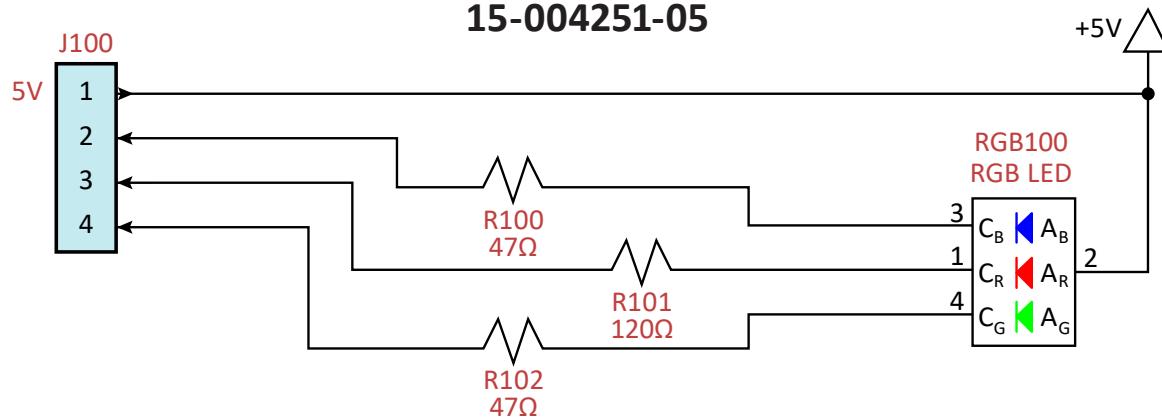
| Component(s) | Part Number | Description |
|--------------|--------------|------------------------------------|
| BARE PCB | 15-000251-00 | RGB GI Bd, T LED FP, 5V |
| R100, R102 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R101 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB100 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| J100 | 30-2203-04 | Header, Male, 4-Pin, 2 Rows, 2.5mm |



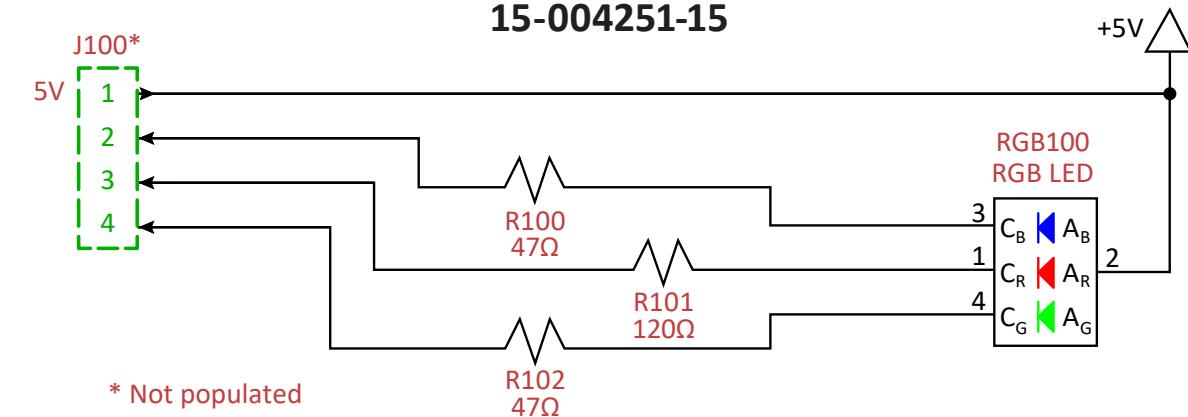
RGB GI PCB Assy, T LED FP, 5V, No Connector 15-004251-15

| Component(s) | Part Number | Description |
|--------------|--------------|------------------------------------|
| BARE PCB | 15-000251-00 | RGB GI Bd, T LED FP, 5V |
| R100, R102 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R101 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB100 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |

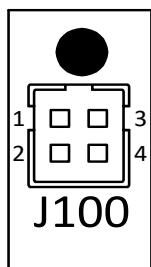
RGB GI PCB Assy, T LED FP, 5V, Straight Connector 15-004251-05



RGB GI PCB Assy, T LED FP, 5V, No Connector 15-004251-15



RGB GI PCB Assy, T LED FP, 5V, Straight Connector 15-004251-05 Connector Pin-out

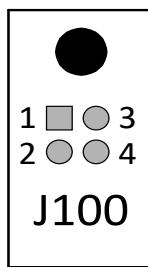


J100 RGB LED Control/Power Input

- | | | |
|--------|---------|--|
| J100-1 | XXX | +5VDC from a main RGB LED bd (P1-P9) |
| J100-2 | XXX-BLU | RGB100 BLU return to a main RGB LED bd (P1-P9) |
| J100-3 | XXX-RED | RGB100 RED return to a main RGB LED bd (P1-P9) |
| J100-4 | XXX-GRN | RGB100 GRN return to a main RGB LED bd (P1-P9) |

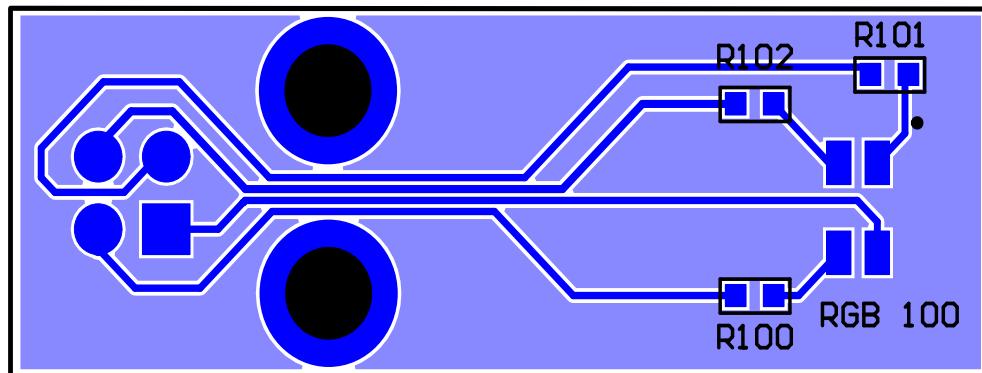
Note: XXX specifies the base color of the wires in the connector (BLK, BRN, RED, ORN, YEL, GRN, BLU or VIO). If the base color matches the stripe (GRN, RED or BLU), a GRY stripe is used for that wire.

RGB GI PCB Assy, T LED FP, 5V, No Connector 15-004251-15 Connector Pin-out



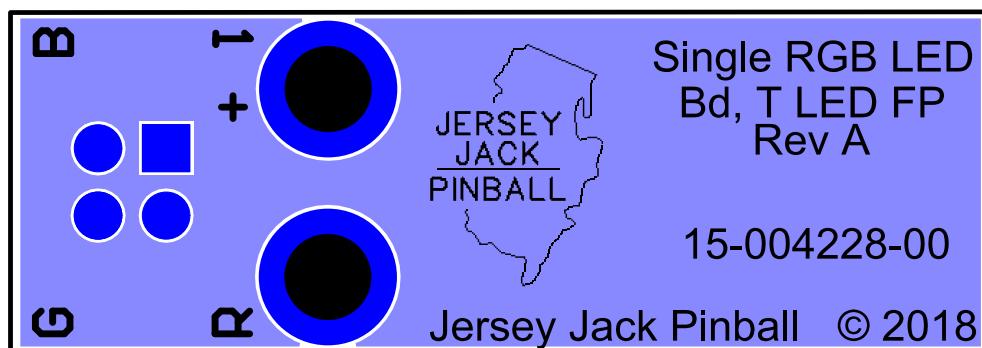
J100 RGB LED Control/Power Input

- | | | |
|-------|---------|--|
| pin-1 | XXX | +5VDC from a main RGB LED bd (P1-P9) |
| pin-2 | XXX-BLU | RGB100 BLU return to a main RGB LED bd (P1-P9) |
| pin-3 | XXX-RED | RGB100 RED return to a main RGB LED bd (P1-P9) |
| pin-4 | XXX-GRN | RGB100 GRN return to a main RGB LED bd (P1-P9) |



**Single RGB LED PCB Assy, T LED FP, 5V, Straight Connector
15-004228-05**

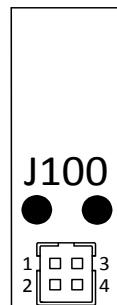
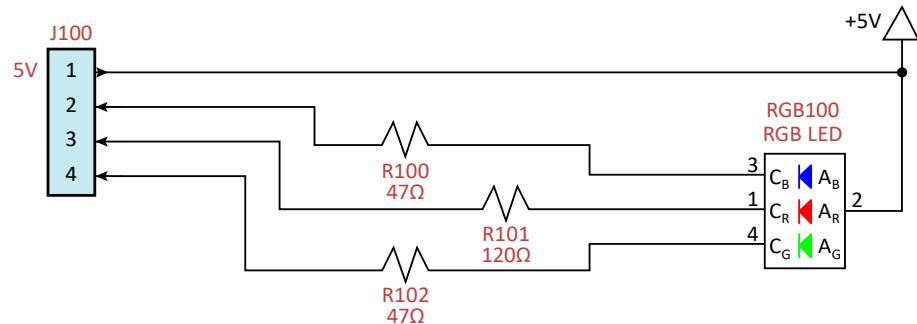
| Component(s) | Part Number | Description |
|--------------|--------------|------------------------------------|
| BARE PCB | 15-000228-00 | Single RGB LED Bd, T LED FP, 5V |
| R100, R102 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R101 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB100 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |
| J100 | 30-2203-04 | Header, Male, 4-Pin, 2 Rows, 2.5mm |



**Single RGB LED PCB Assy, T LED FP, 5V, No Connector
15-004228-15**

| Component(s) | Part Number | Description |
|--------------|--------------|------------------------------------|
| BARE PCB | 15-000228-00 | Single RGB LED Bd, T LED FP, 5V |
| R100, R102 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R101 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB100 | 24-000027-0S | LED, SMT, RGB, 622/523/470nm |

Single RGB LED PCB Assy, T LED FP, 5V, Straight Connector
15-004228-05



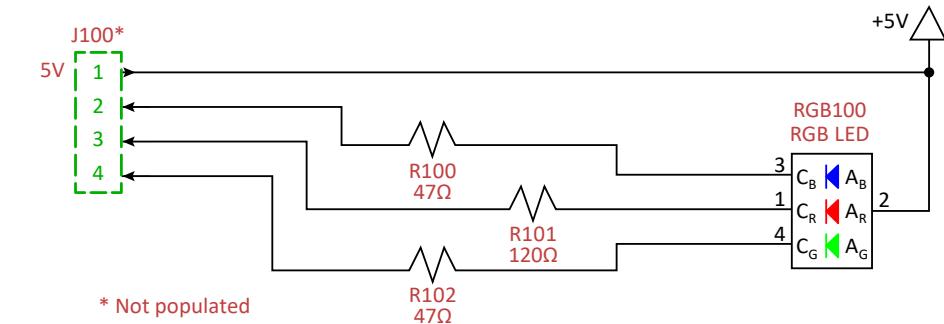
Single RGB LED PCB Assy, T LED FP, 5V, Straight Connector
15-004228-05
Connector Pin-outs

J100 RGB LED Control/Power Input (RGB Cable 19-009038-05)

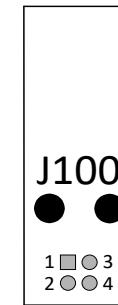
RGB LED 53 [Shoot Again]

| | | |
|--------|---------|---|
| J100-1 | BLK | +5VDC from Mode & Multiball RGB LED Bd (P2), J204-1 |
| J100-2 | BLK-BLU | RGB100 BLU return to Mode & Multiball RGB LED Bd (P2), J204-2 |
| J100-3 | BLK-RED | RGB100 RED return to Mode & Multiball RGB LED Bd (P2), J204-3 |
| J100-4 | BLK-GRN | RGB100 GRN return to Mode & Multiball RGB LED Bd (P2), J204-4 |

Single RGB LED PCB Assy, T LED FP, 5V, No Connector
15-004228-15



* Not populated



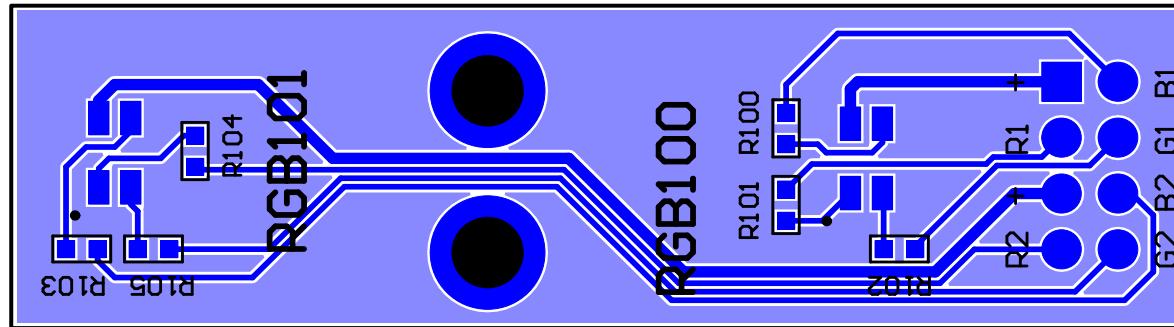
Single RGB LED PCB Assy, T LED FP, 5V, No Connector
15-004228-15
Connector Pin-outs

J100 RGB LED Control/Power Input (RGB Cables 19-009038-05 & 19-009038-06)

Soldered to board: RGB Cable 19-009038-06

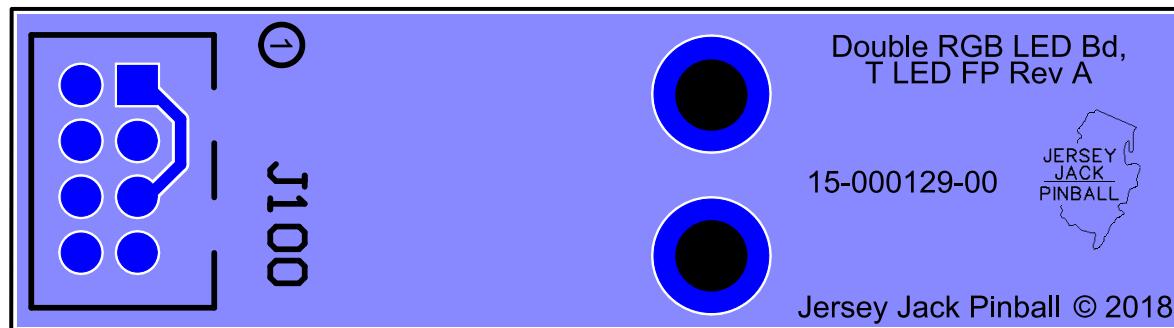
RGB LED 54 [Action Button]

| | | |
|-------|---------|---|
| pin-1 | BRN | +5VDC from Mode & Multiball RGB LED Bd (P2), J204-5 |
| pin-2 | BRN-BLU | RGB100 BLU return to Mode & Multiball RGB LED Bd (P2), J204-6 |
| pin-3 | BRN-RED | RGB100 RED return to Mode & Multiball RGB LED Bd (P2), J204-7 |
| pin-4 | BRN-GRN | RGB100 GRN return to Mode & Multiball RGB LED Bd (P2), J204-8 |



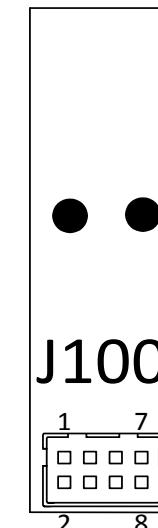
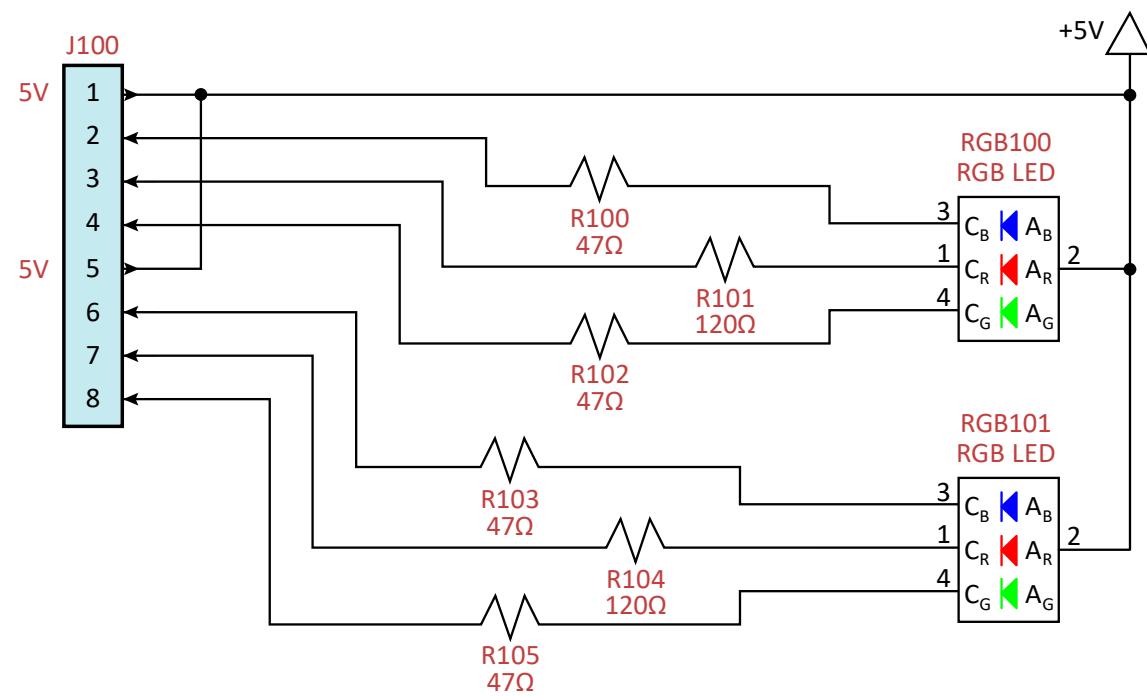
Double RGB LED PCB Assy, T LED FP, 5V
15-004129-05

| Component(s) | Part Number | Description |
|------------------------|--------------|------------------------------------|
| BARE PCB | 15-000129-00 | Double RGB LED Bd, T LED FP |
| R100, R102, R103, R105 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R101, R104 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB100, RGB101 | 24-000027-05 | LED, SMT, RGB, 622/523/470nm |
| J100 | 30-2203-08 | Header, Male, 8-Pin, 2 Rows, 2.5mm |



Jersey Jack Pinball © 2018

Double RGB LED PCB Assy, T LED FP, 5V
15-004129-05



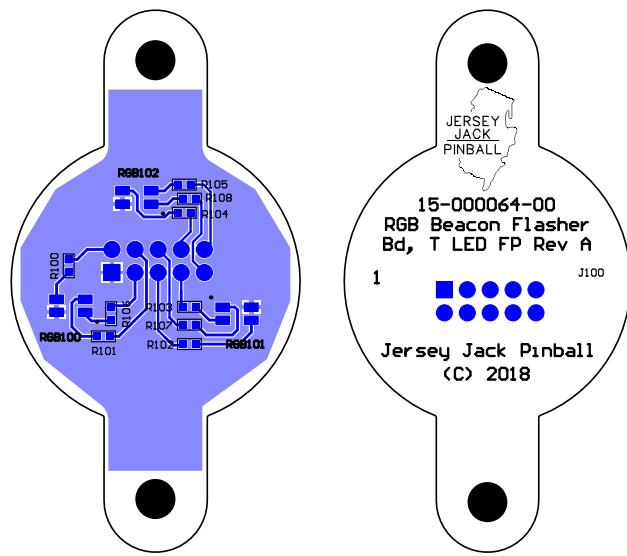
Double RGB LED PCB Assy, T LED FP, 5V
15-004129-05
Connector Pin-outs

J100 RGB LED Control/Power Input (RGB Cable 19-009038-05)
RGB LED 55 [Tilt Warning 1]

| | | |
|--------|---------|--|
| J100-1 | RED | +5VDC from Mode & Multiball RGB LED Bd (P2), J204-9 |
| J100-2 | RED-BLU | RGB100 BLU return to Mode & Multiball RGB LED Bd (P2), J204-10 |
| J100-3 | RED-GRY | RGB100 RED return to Mode & Multiball RGB LED Bd (P2), J204-11 |
| J100-4 | RED-GRN | RGB100 GRN return to Mode & Multiball RGB LED Bd (P2), J204-12 |

RGB LED 56 [Tilt Warning 2]

| | | |
|--------|---------|--|
| J100-5 | ORN | +5VDC from Mode & Multiball RGB LED Bd (P2), J204-13 |
| J100-6 | ORN-BLU | RGB100 BLU return to Mode & Multiball RGB LED Bd (P2), J204-14 |
| J100-7 | ORN-RED | RGB100 RED return to Mode & Multiball RGB LED Bd (P2), J204-15 |
| J100-8 | ORN-GRN | RGB100 GRN return to Mode & Multiball RGB LED Bd (P2), J204-16 |



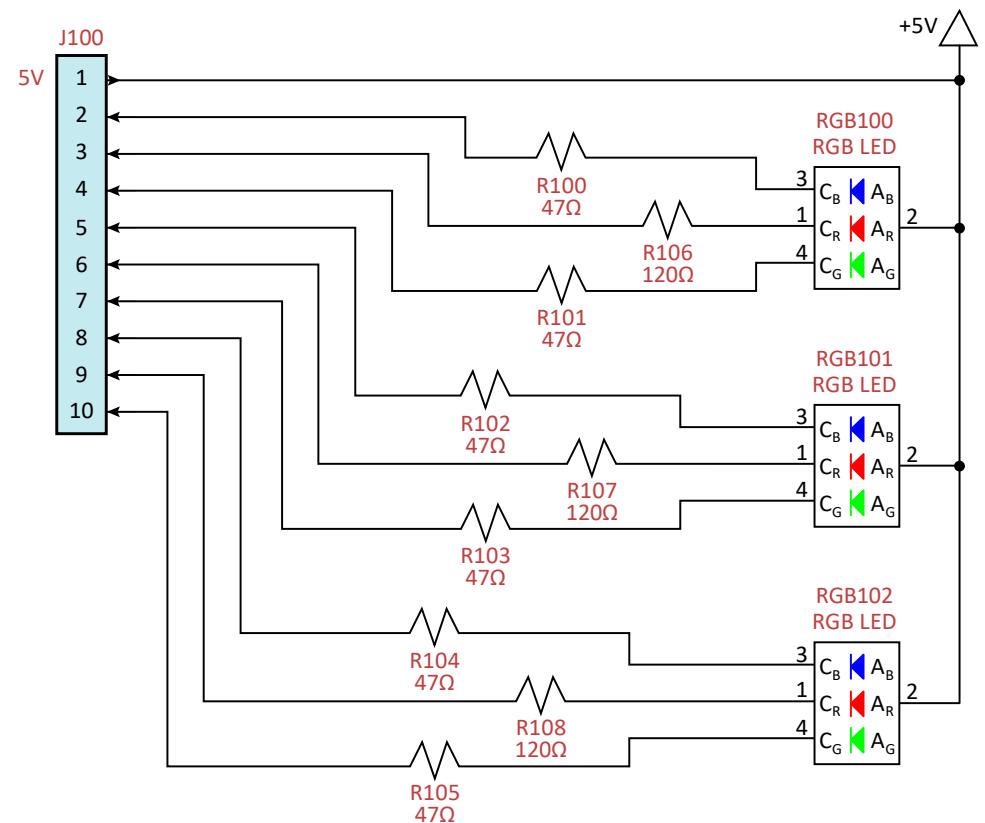
**RGB Beacon Flasher PCB Assy, T LED FP, 5V, Straight Connector
15-004064-05**

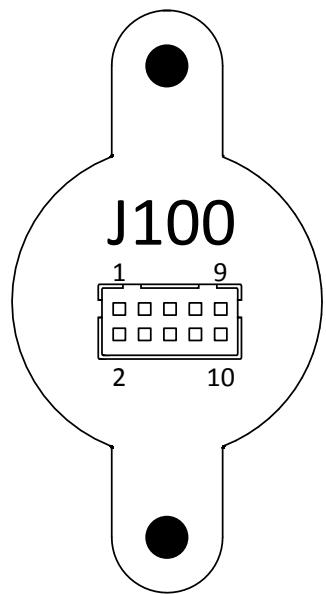
| Component(s) | Part Number | Description |
|---------------|--------------|-------------------------------------|
| BARE PCB | 15-000064-00 | RGB Beacon Flasher Bd, T LED FP, 5V |
| R100-R105 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R106-R108 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB100-RGB102 | 24-000027-05 | LED, SMT, RGB, 622/523/470nm |
| J100 | 30-2203-10 | Header, Male, 10-Pin, 2 Rows, 2.5mm |

**RGB Beacon Flasher PCB Assy, T LED FP, 5V, Rt Angle Connector
15-004064-25**

| Component(s) | Part Number | Description |
|---------------|--------------|---|
| BARE PCB | 15-000064-00 | RGB Beacon Flasher Bd, T LED FP, 5V |
| R100-R105 | 122-0047-102 | Resistor, 0603 SMT, 47Ω, 0.1W, 1% |
| R106-R108 | 122-0120-104 | Resistor, 0603 SMT, 120Ω, 0.1W, 5% |
| RGB100-RGB102 | 24-000027-05 | LED, SMT, RGB, 622/523/470nm |
| J100 | 30-2213-10 | Header, Male, 10-Pin, 2 Rows, Rt Angle, 2.5mm |

**RGB Beacon Flasher PCB Assy, T LED FP, 5V, Straight Connector
RGB Beacon Flasher PCB Assy, T LED FP, 5V, Rt Angle Connector
15-004064-05 & 15-004064-25**





RGB Beacon Flasher PCB Assy, T LED FP, 5V, Straight Connector
15-004064-05
Connector Pin-outs

J100 RGB LED Control/Power Input (RGB Cable 19-009038-00)

RGB LED 86 [Left Beacon Flasher #1]

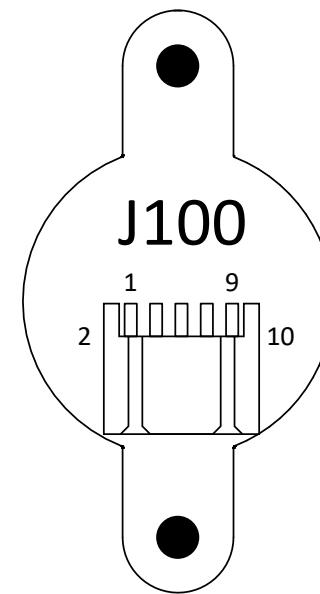
| | | |
|--------|---------|--|
| J100-1 | BLK | +5VDC from Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-1 |
| J100-2 | BLK-BLU | RGB100 GRN return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-2 |
| J100-3 | BLK-RED | RGB100 RED return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-3 |
| J100-4 | BLK-GRN | RGB100 BLU return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-4 |

RGB LED 87 [Left Beacon Flasher #2]

| | | |
|--------|---------|--|
| J100-5 | BRN-BLU | RGB100 GRN return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-6 |
| J100-6 | BRN-RED | RGB100 RED return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-7 |
| J100-7 | BRN-GRN | RGB100 BLU return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-8 |

RGB LED 88 [Left Beacon Flasher #3]

| | | |
|---------|---------|---|
| J100-8 | RED-BLU | RGB100 GRN return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-10 |
| J100-9 | RED-GRY | RGB100 RED return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-11 |
| J100-10 | RED-GRN | RGB100 BLU return to Left Ramp & Turnaround Loop RGB LED Bd (P3), J302-12 |



RGB Beacon Flasher PCB Assy, T LED FP, 5V, Rt Angle Connector
15-004064-25
Connector Pin-outs

J100 RGB LED Control/Power Input (RGB Cable 19-009038-00)

RGB LED 28 [Right Beacon Flasher #1]

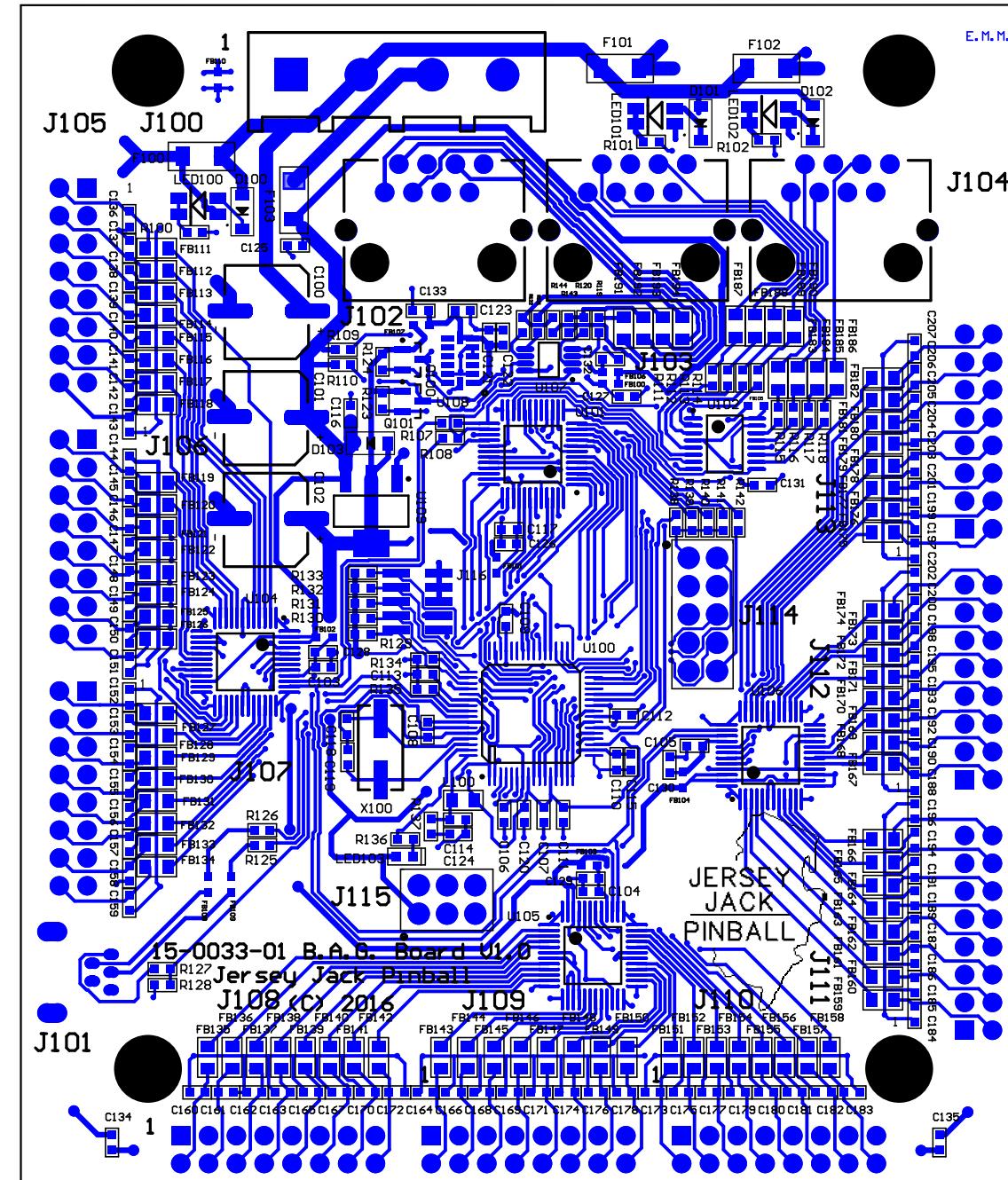
| | | |
|--------|---------|--|
| J100-1 | BLK | +5VDC from Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-1 |
| J100-2 | BLK-BLU | RGB100 GRN return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-2 |
| J100-3 | BLK-RED | RGB100 RED return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-3 |
| J100-4 | BLK-GRN | RGB100 BLU return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-4 |

RGB LED 29 [Right Beacon Flasher #2]

| | | |
|--------|---------|--|
| J100-5 | BRN-BLU | RGB100 GRN return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-6 |
| J100-6 | BRN-RED | RGB100 RED return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-7 |
| J100-7 | BRN-GRN | RGB100 BLU return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-8 |

RGB LED 30 [Right Beacon Flasher #3]

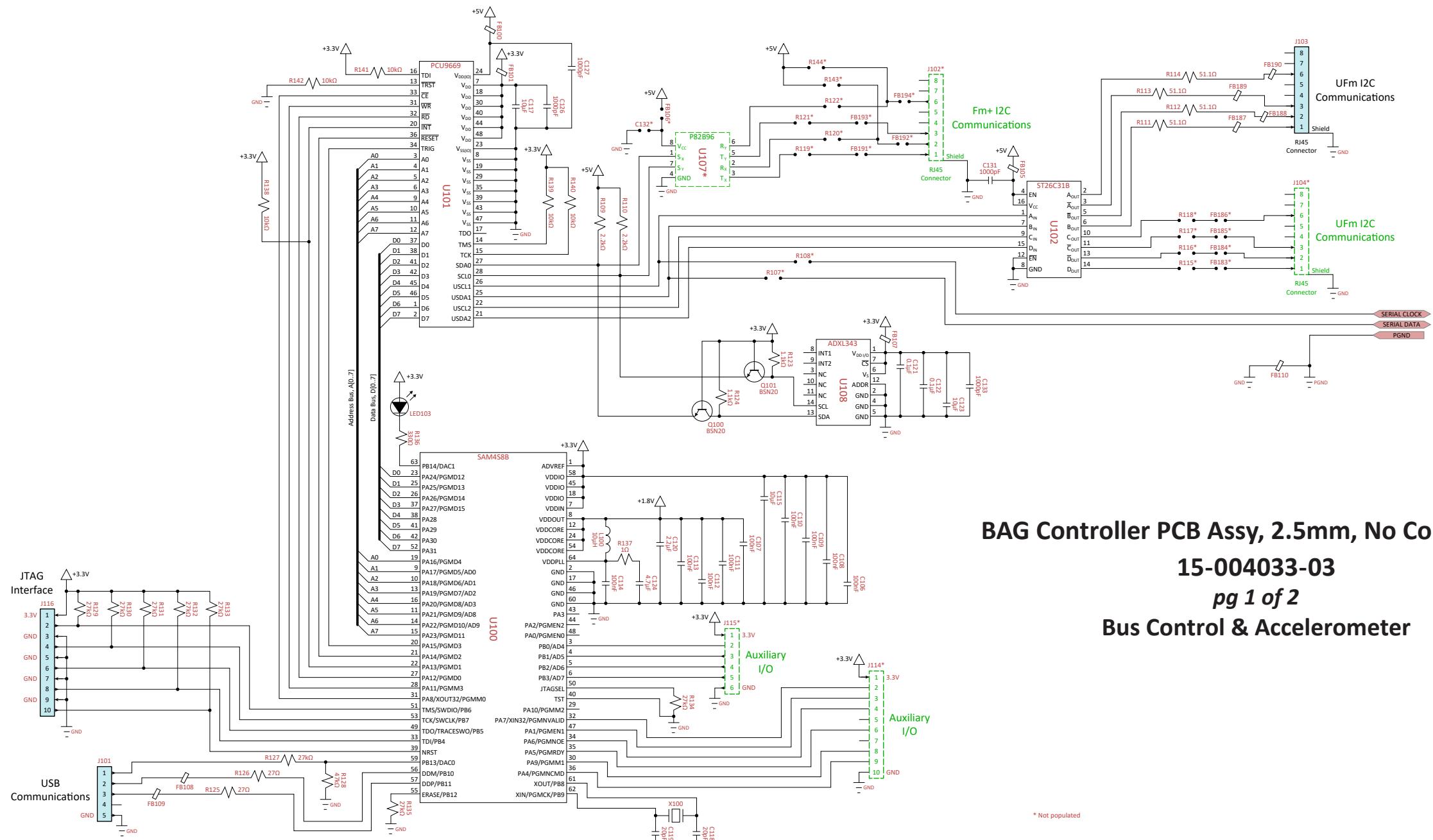
| | | |
|---------|---------|---|
| J100-8 | RED-BLU | RGB100 GRN return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-10 |
| J100-9 | RED-GRY | RGB100 RED return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-11 |
| J100-10 | RED-GRN | RGB100 BLU return to Subway Entrance/Inner Orbit RGB LED Bd (P1), J103-12 |



BAG Controller PCB Assy, 2.5mm, No Connectors

15-004033-03

| Component(s) | Part Number | Description | Component(s) | Part Number | Description |
|--|--------------------|---|---|--------------------|---|
| BARE PCB | 15-0033-01 | Bus, Accelerometer & GI Controller Bd, 2.5mm | R136 | 122-0330-102 | Resistor, 0603 SMT, 330Ω, 0.1W, 1% |
| C100 | | Not Populated | R111-R114 | 122-51P1-102 | Resistor, 0603 SMT, 51.1Ω, 0.1W, 1% |
| C101, C102 | 109-100M-035 | Capacitor, Elect (Radial), 100µF, 35V, 20% | R109, R110 | 122-02K2-104 | Resistor, 0603 SMT, 2.2kΩ, 0.1W, 5% |
| C106-C114, C121, C122 | 103-104K-025 | Capacitor, MLCC, 0603 SMT, 0.1µF, 25V, 10% | R123, R124 | 122-01K1-104 | Resistor, 0603 SMT, 1.1kΩ, 0.1W, 5% |
| C115-C117 | 103-106M-016 | Capacitor, MLCC, 0603 SMT, 10µF, 16V, 20% | R125, R126 | 122-0027-102 | Resistor, 0603 SMT, 27Ω, 0.1W, 1% |
| C118, C119 | 103-200J-050 | Capacitor, MLCC, 0603 SMT, 20pF, 50V, 5% | R127, R129-R135 | 122-027K-104 | Resistor, 0603 SMT, 27kΩ, 0.1W, 5% |
| C120 | 103-225K-016 | Capacitor, MLCC, 0603 SMT, 2.2µF, 16V, 10% | R128 | 122-047K-102 | Resistor, 0603 SMT, 47kΩ, 0.1W, 1% |
| C123 | 103-106M-006 | Capacitor, MLCC, 0603 SMT, 10µF, 6.3V, 20% | R137 | 122-0001-104 | Resistor, 0603 SMT, 1Ω, 0.1W, 5% |
| C124 | 103-475K-006 | Capacitor, MLCC, 0603 SMT, 4.7µF, 6.3V, 10% | R138-R142 | 122-010K-104 | Resistor, 0603 SMT, 10kΩ, 0.1W, 5% |
| C125-C127, C131, C133 | 103-102K-050 | Capacitor, MLCC, 0603 SMT, 1000pF, 50V, 10% | R100-R102, R107, R108, R115-R122, R143, R144 | | Not Populated |
| C103-C105, C128-C130, C132, C134-C207 | | Not Populated | U100 | 141-0021-05 | Microcontroller, 32-Bit, 120MHz, SAM4S8B, LQFP-64 SMT |
| D103 | 110-0011-05 | Diode, MBR0520L, SMT, Schottky Rectifier, 0.5A | U101 | 141-0022-05 | I2C-Bus Controller, UFm, 3-Ch, PCU9669B, LQFP-48 SMT |
| D100-D102 | | Not Populated | U102 | 140-0006-05 | Quad Diff Line Driver w/3-State Outputs, ST26C31B, TSSOP-16 SMT |
| F103 | 170-6303-SS | Fuse, Slow, 1206 SMT, 3A, 63V | U108 | 141-0024-05 | Accelerometer, 3-Axis, I2C-Bus, ADXL343, LGA-14 SMT |
| F100-F102 | | Not Populated | U109 | 142-0009-05 | Voltage Regulator, TLV1117, SOT-223-4 SMT, 3.3V, 300mA |
| FB100, FB101, FB105, FB107-FB110 | 195-5002-05 | EMI Filter Bead, 0603 SMT, 2.2kΩ at 100MHz, 150mA | U104-U107 | | Not Populated |
| FB187-FB190 | 195-5003-05 | EMI Filter Bead, 0805 SMT, 2.5kΩ at 100MHz, 200mA | X100 | 160-0003-05 | Crystal, 12MHz, 120-20-3X-TR, SMT, 20pF, 50PPM |
| FB102-FB104, FB106, FB111-FB186, FB191-FB194 | | Not Populated | J100 | 30-2005-04 | Header, Male, 4-pin, 6.35mm |
| L100 | 190-0008-05 | Inductor, SMD, 10µH, 350mA, 50MHz | J101 | 31-2507-01 | Receptacle, Mini USB 2.0, Type B |
| LED103 | 24-0021-05 | LED, 0603 SMD, YEL, 571nm | J103 | 30-2510-01 | Jack Header, w/Shield, RJ45 (Ethernet) |
| LED100-LED102 | | Not Populated | J102, J104, J105-J115 | | Not Populated |
| Q100, Q101 | 130-0006-05 | MOSFET, BSN20-7, N-Ch, SOT-23-3, 50V, 500mA | J116 | 31-2514-10 | Header, Male, 10-pin, 2 Rows, 1.27mm |

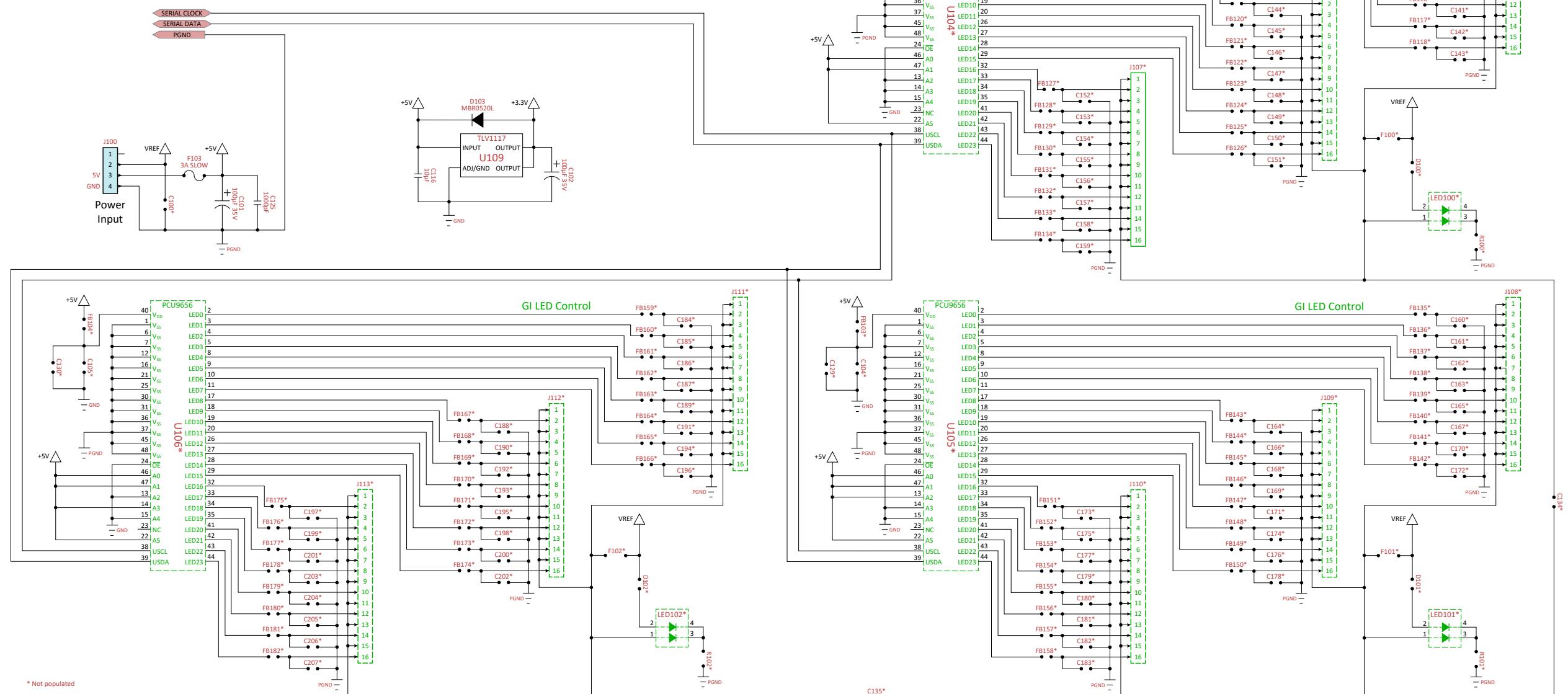


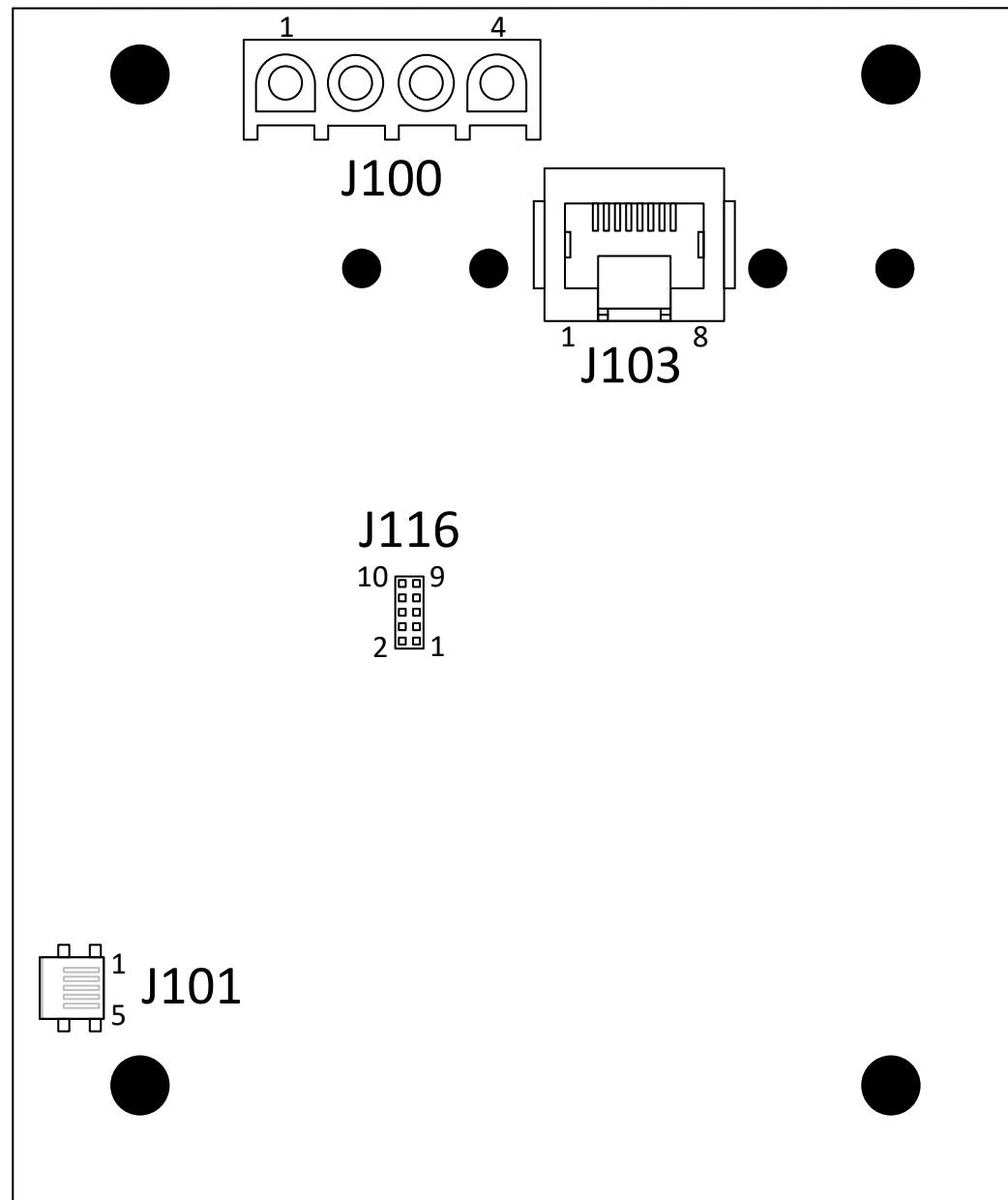
BAG Controller PCB Assy, 2.5mm, No Connectors

15-004033-03

pg 2 of 2

Power Input & GI Control





BAG Controller PCB Assy, 2.5mm, No Connectors
15-004033-03
Connector Pin-outs

J100 DC Power Input

| | | |
|--------|----------|----------------------------|
| J100-1 | Not Used | |
| J100-2 | Not Used | |
| J100-3 | RED | +5VDC from ATX Pwr Supply |
| J100-4 | BLK | Ground from ATX Pwr Supply |

J101 USB Communications

USB Mini-B to 2.0 A cable from back of CPU Bd, USB port

J103 UFM I2C Communications

CAT5 or higher Ethernet cable to Left Orbit & Upper Targets RGB LED Bd (P9), J110

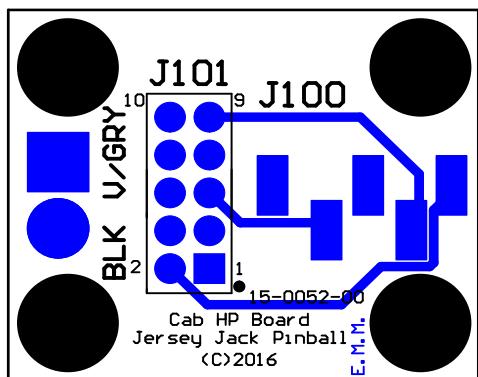
J116 JTAG Interface

Not Used

Cabinet Headphone Board

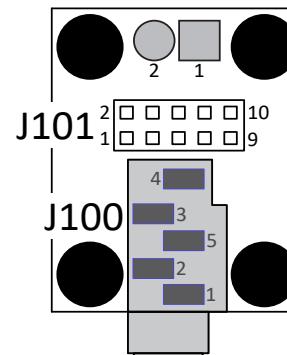
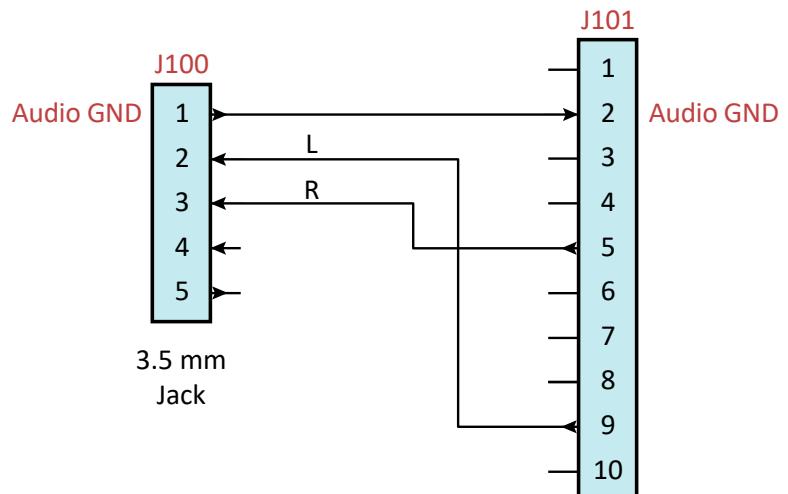
15-000052-00

| Component(s) | Part Number | Description |
|--------------|--------------|--------------------------------------|
| J100 | 30-002506-20 | Jack Header, 3.5mm, Rt Angle, Black |
| J101 | 31-002508-10 | Header, Male, 10-pin, 2 Rows, 2.54mm |



Cabinet Headphone Board

15-000052-00



Cabinet Headphone Board, 15-000052-00
Connector Pin-outs

J100 Headphone Jack

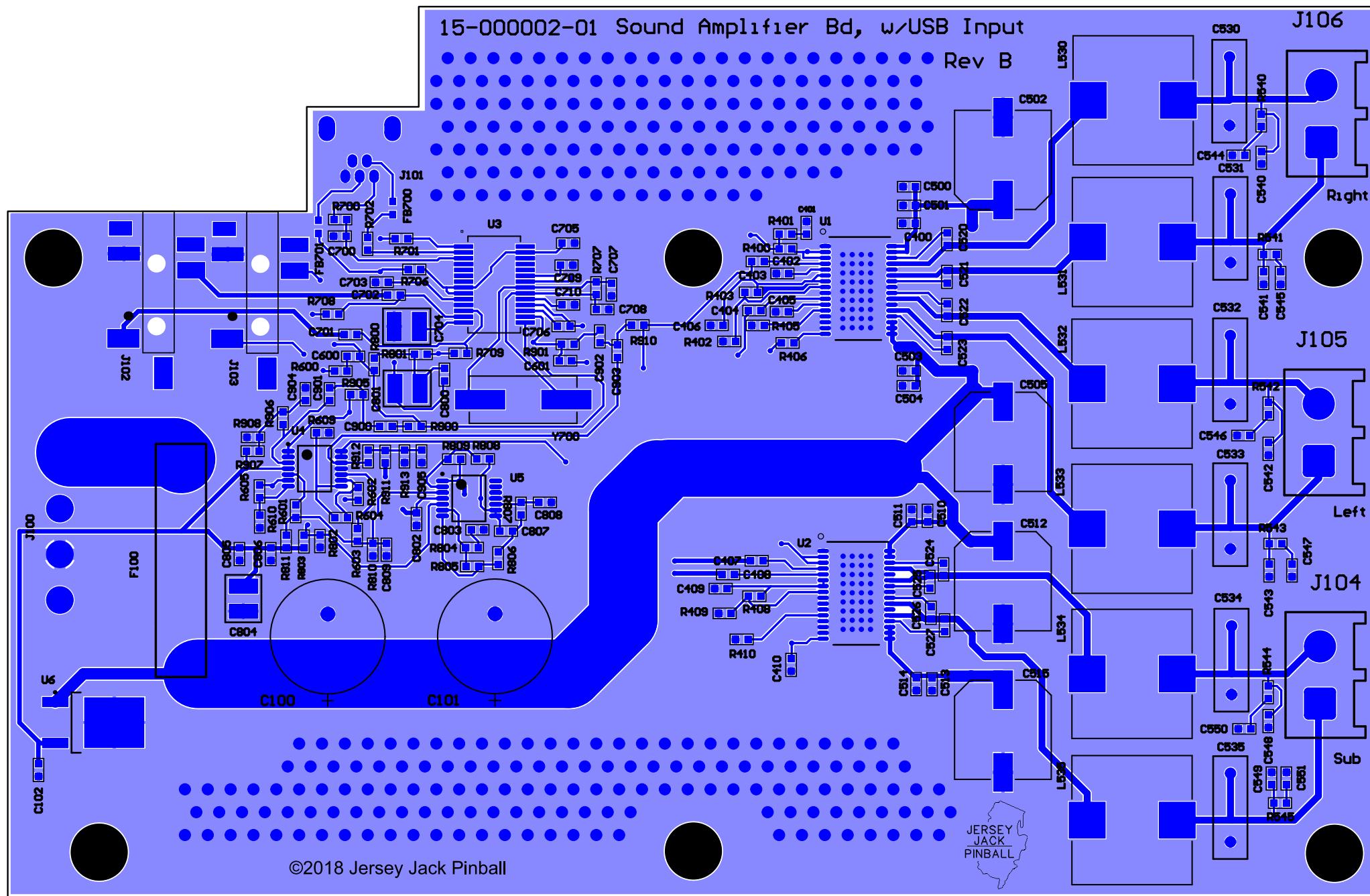
3.5mm headphone/audio cable

J101 CPU Audio Input

| | | |
|---------|----------|---|
| J101-1 | Not Used | |
| J101-2 | BLK-BRN | Audio ground from CPU Board, F_AUDIO-2 |
| J101-3 | Not Used | |
| J101-4 | Not Used | |
| J101-5 | BLK-YEL | Right audio channel from CPU Board, F_AUDIO-5 |
| J101-6 | Not Used | |
| J101-7 | Not Used | |
| J101-8 | Not Used | |
| J101-9 | BLK-VIO | Left audio channel from CPU Board, F_AUDIO-9 |
| J101-10 | Not Used | |

Soldered to board

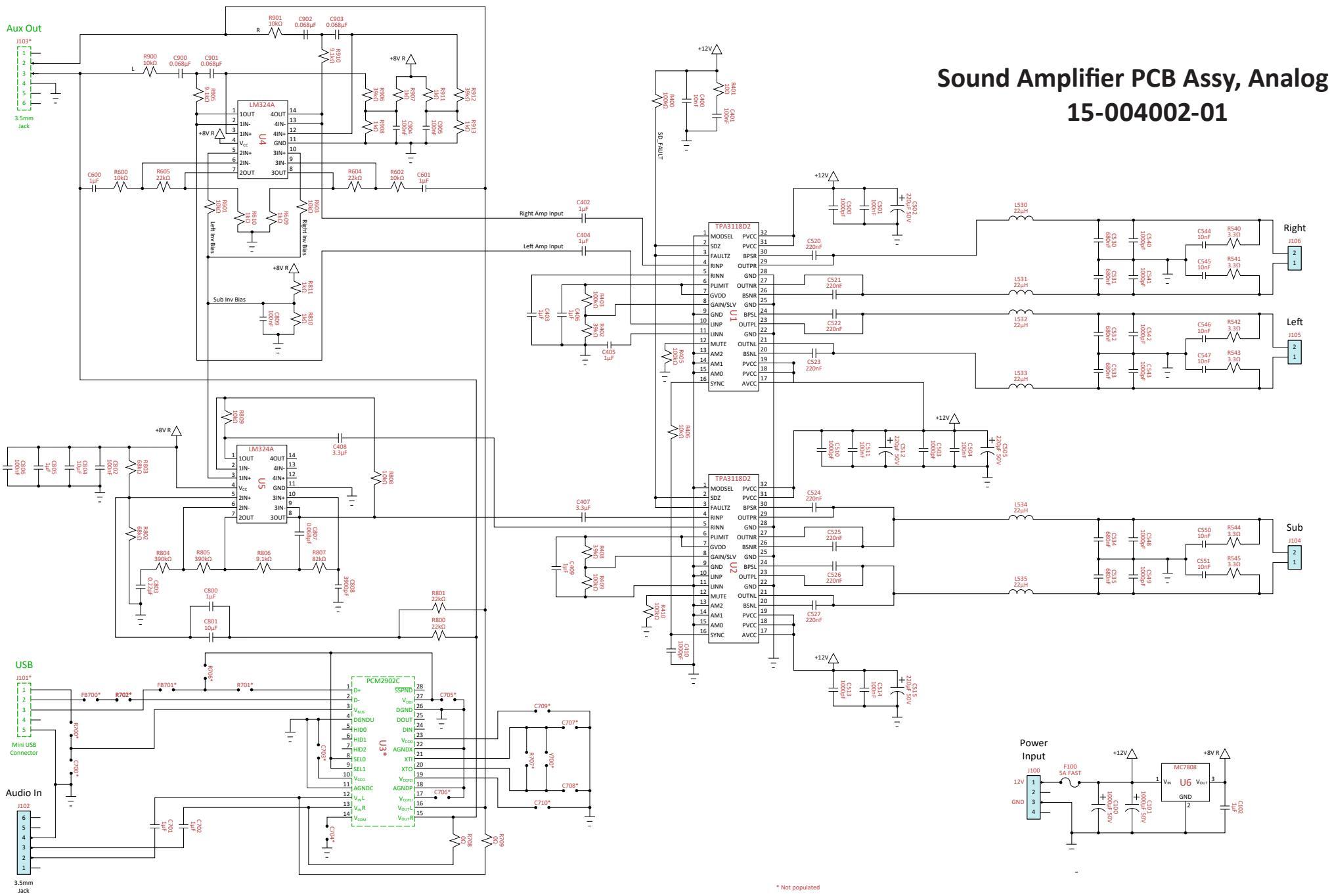
| | | |
|-------|---------|---|
| pin 1 | VIO-GRY | Dedicated switch return 32 [Headphone Jack Sense], I/O Board, J604-10 |
| pin 2 | BLK | Dedicated switch common (Ground), I/O Board, J604-1 |

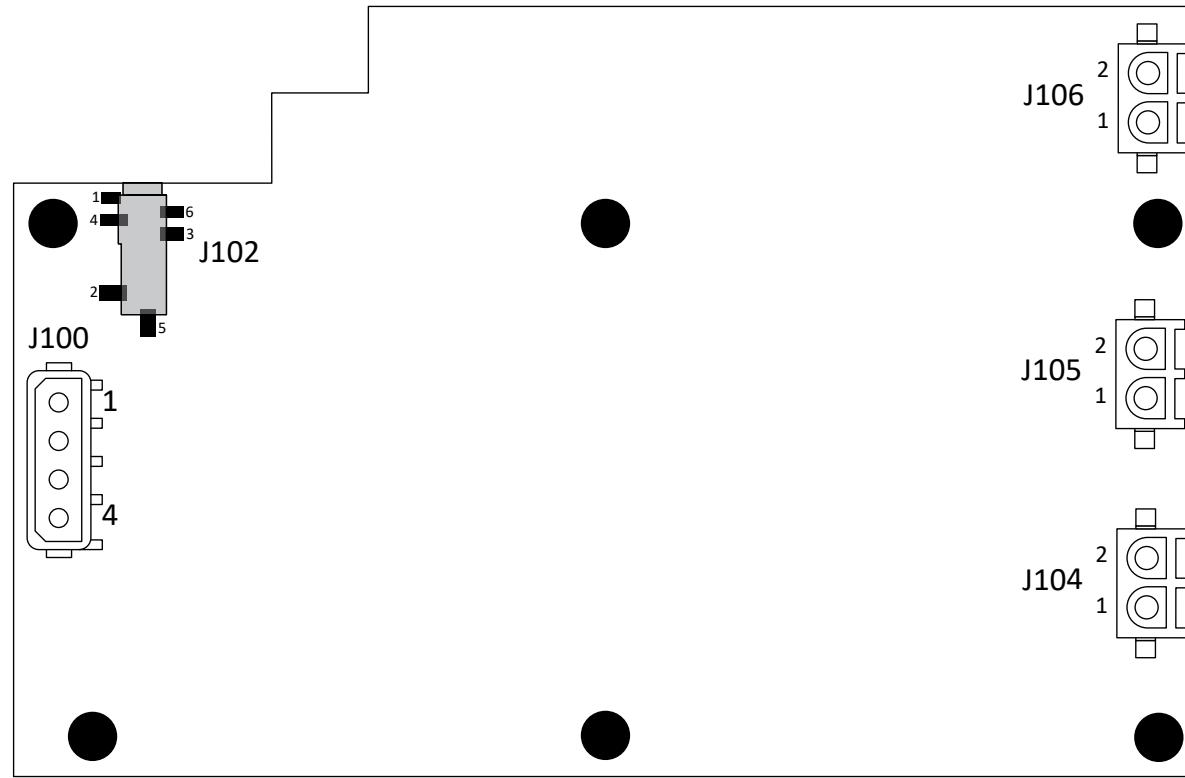


Sound Amplifier PCB Assy, Analog In

15-004002-01

| Component(s) | Part Number | Description | Component(s) | Part Number | Description |
|--|--------------------|--|---|--------------------|---|
| BARE PCB | 15-000002-01 | Sound Amplifier Bd, w/USB Input | L530-L535 | 190-0008-0S | Inductor, Wirewound, SMD, 22µH, 6.3A |
| C100, C101 | 109-01KM-050 | Capacitor, Elect (Radial), 1000µF, 50V, 20% | R400, R403, R405, R409, R410 | 122-100K-102 | Resistor, 0603 SMT, 100kΩ, 0.1W, 1% |
| C102, C406, C409, C600, C601, C701, C702 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% | R401 | 122-0010-102 | Resistor, 0603 SMT, 10Ω, 0.1W, 1% |
| C400, C544-C547, C550, C551 | 103-103K-050 | Capacitor, MLCC, 0603 SMT, 10nF, 50V, 10% | R402, R408, R906, R912 | 122-039K-102 | Resistor, 0603 SMT, 39kΩ, 0.1W, 1% |
| C401, C501, C504, C511, C514, C802, C806, C809, C904, C905 | 103-104K-016 | Capacitor, MLCC, 0603 SMT, 100nF, 16V, 10% | R406, R600-R603, R808, R809, R900, R901 | 122-010K-104 | Resistor, 0603 SMT, 10kΩ, 0.1W, 5% |
| C402-C405 | 103-105K-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, 10% | R540-R545 | 122-03P3-254 | Resistor, 0603 SMT, 3.3Ω, 0.25W, 5% |
| C407, C408 | 103-335K-016 | Capacitor, MLCC, 0603 SMT, 3.3µF, 16V, 10% | R604, R605, R800, R801 R609, R610, R810, R811, R907, R908, R911, R913 | 122-022K-102 | Resistor, 0603 SMT, 22kΩ, 0.1W, 1% |
| C410, C500, C503, C510, C513, C540-C543, C548, C549 | 103-102K-050 | Capacitor, MLCC, 0603 SMT, 1000pF, 50V, 10% | R708, R709 | 122-001K-104 | Resistor, 0603 SMT, 1kΩ, 0.1W, 5% |
| C502, C505, C512, C515 | 109-227M-050 | Capacitor, Elect (SMD), 220µF, 50V, 20% | R802, R803 | 122-0000-100 | Resistor, 0603 SMT, 0Ω, 0.1W |
| C520-C527 | 103-224K-050 | Capacitor, MLCC, 0603 SMT, 220nF, 50V, 10% | R804, R805 | 122-068K-102 | Resistor, 0603 SMT, 68kΩ, 0.1W, 1% |
| C530-C533 | 104-684J-100 | Capacitor, Polyester, Radial, 680nF, 100V, 5% | R806, R905, R910 | 122-390K-102 | Resistor, 0603 SMT, 390kΩ, 0.1W, 1% |
| C534, C535 | 104-105K-100 | Capacitor, Polyester, Radial, 1µF, 100V, 10% | R807 | 122-09K1-102 | Resistor, 0603 SMT, 9.1kΩ, 0.1W, 1% |
| C800, C805 | 103-105Z-016 | Capacitor, MLCC, 0603 SMT, 1µF, 16V, +80%, -20% | R700-R702, R706, R707 | 122-082K-102 | Resistor, 0603 SMT, 82kΩ, 0.1W, 1% |
| C801, C804 | 102-106Z-016 | Capacitor, MLCC, 0603 SMT, 10µF, 16V, +80%, -20% | U1, U2 | 140-0007-0S | Not Populated |
| C803 | 103-224K-016 | Capacitor, MLCC, 0603 SMT, 0.22µF, 16V, 10% | U4, U5 | 140-0008-0S | Audio Amp, Stereo, TPA3118D2, HTSSOP-32 SMT |
| C807, C900-C903 | 103-683K-025 | Capacitor, MLCC, 0603 SMT, 0.068µF, 25V, 10% | U6 | 142-0002-0S | Op Amp, Quad, LM324A, TSSOP-14 SMT |
| C808 | 103-392K-025 | Capacitor, MLCC, 0603 SMT, 3900pF, 25V, 10% | U3 | | Voltage Regulator, MC7808, TO-252-3 SMT, 8V, 1A |
| C700, C703-C710 | | Not Populated | Y700 | | Not Populated |
| F100 | 170-0205-FM | Fuse, Fast-Acting, 5A, 250V, 5mm x 20mm | J100 | 31-2502-04 | Not Populated |
| F100 | 22-8007-01 | Fuse Holder, 5mm x 20mm, SMD, 250V, 6.3A | J101, J103 | 31-2502-04 | Connector Header, 4-pin, Power |
| FB700, FB701 | | Not Populated | J102 | 30-2516-06 | Not Populated |
| | | | J104-J106 | 30-2005-02 | Jack Header, SMT, 3.5mm, Rt Angle, Blue |
| | | | | | Header, Male, 2-pin, 6.35mm |





Sound Amplifier PCB Assy, Analog In, 15-004002-01 Connector Pin-outs

J100 DC Power Input

- | | | |
|------|----------|----------------------------|
| J1-1 | YEL | +12VDC from ATX Pwr Supply |
| J1-2 | Not Used | |
| J1-3 | BLK | Ground from ATX Pwr Supply |
| J1-4 | Not Used | |

J102 Audio Input

3.5mm audio cable from CPU Board (audio out),

J104 Cabinet Speaker Connection

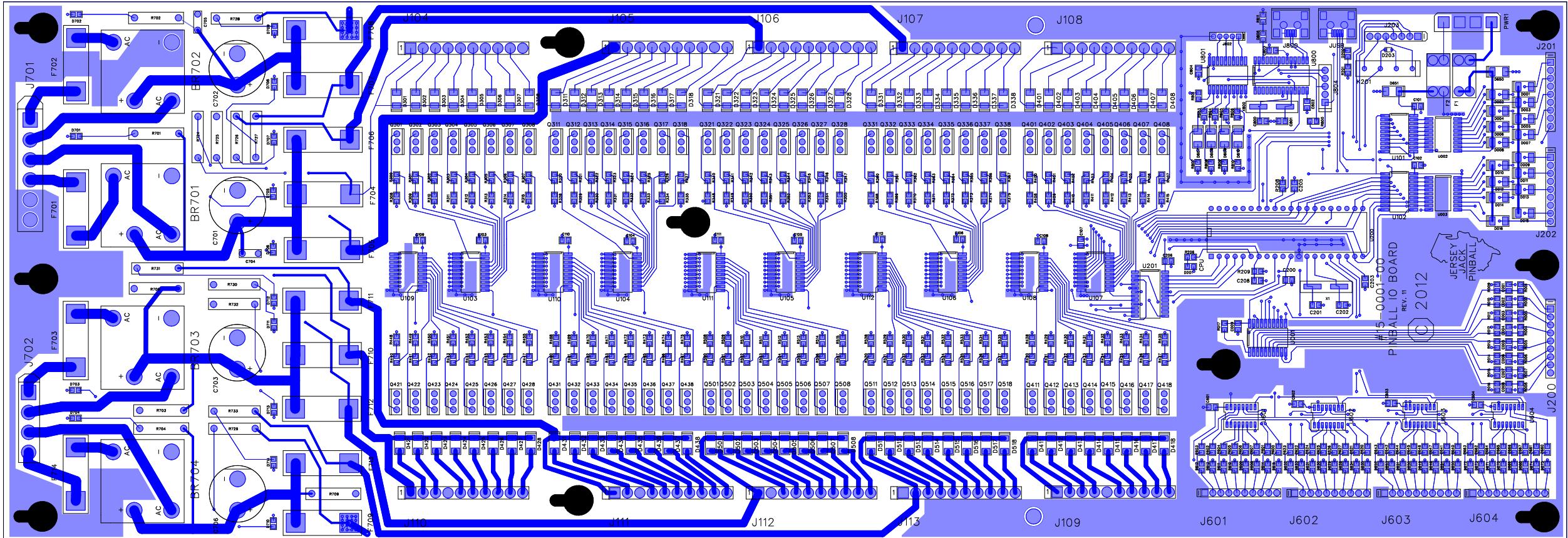
- | | | |
|------|-----|-------------------------------------|
| J1-1 | RED | + Amplified subwoofer channel audio |
| J1-2 | BLK | - Amplified subwoofer channel audio |

J105 Backbox Speaker Connection (Right)

- | | | |
|------|---------|---------------------------------|
| J1-1 | RED-WHT | + Amplified right channel audio |
| J1-2 | BLK | - Amplified right channel audio |

J106 Backbox Speaker Connection (Left)

- | | | |
|------|---------|--------------------------------|
| J1-1 | BLK-WHT | + Amplified left channel audio |
| J1-2 | BLK | - Amplified left channel audio |

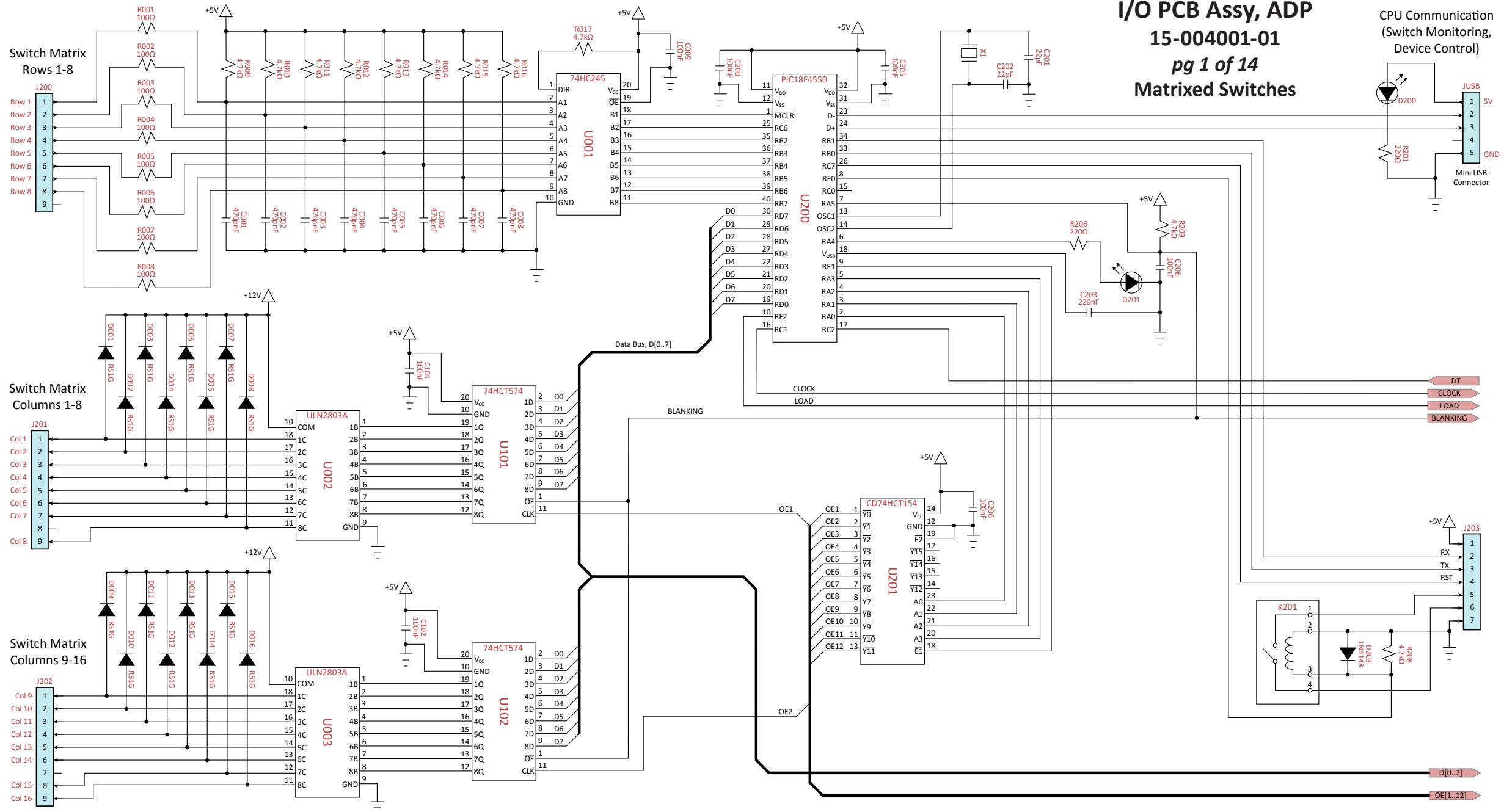


I/O PCB Assy, All Drives Populated

15-004001-01

| Component(s) | Part Number | Description | Component(s) | Part Number | Description |
|--|--------------|--|--|--------------|---|
| BARE PCB | 15-0001-00 | I/O Board | C704-C705 | 101-104K-630 | Capacitor, MLCC, Leaded, 100nF, 630V, 10% |
| BR701-BR704 | 150-0001-0T | Bridge Rectifier, Wire Leads, 600V, 35A | C800-C804 | | Not Populated |
| C001-C008 | 100-471J-050 | Capacitor, MLCC, 0805 SMT, 470pF, 50V, 5% | D203 | 110-1000-0S | Diode, 1N4148, SMT, 75V, 300mA |
| C009, C101-C112, C200, C205, C206, C208, C601-C604 | 100-104K-050 | Capacitor, MLCC, 0805 SMT, 100nF, 50V, 10% | D301-D308, D311-D318, D321-D328, D331-D338, | | |
| C201, C202 | 100-220J-050 | Capacitor, MLCC, 0805 SMT, 22pF, 50V, 5% | D401-D408, D411-D418, D421-D428, D431-D438, | | |
| C203, C802 | 100-224K-050 | Capacitor, MLCC, 0805 SMT, 220nF, 50V, 10% | D501-D508, D511-D518, | | |
| C701, C702 | 109-3K3M-100 | Capacitor, Elect (Radial), 3300µF, 100V, 20% | D001-D016, D650, D651 | 110-5001-0S | Diode, RS1G, SMT, 400V, 1A, 150ns |
| C703, C706 | 109-15KM-035 | Capacitor, Elect (Radial), 15000µF, 35V, 20% | D701-D714, D200, D203 | 24-0014-0S | LED, 0805 SMD, RED, 621nm |

| Component(s) | Part Number | Description | Component(s) | Part Number | Description |
|--|--------------------|---|-----------------------------|--------------------|---|
| D806-D810 | | Not Populated | R701, R702, R724-R728 | 121-06K8-2H4 | Resistor, Leaded, 6.8kΩ, 2W, 5% |
| F701, F702 | 170-0110-SM | Fuse, Time Delay, 10A, 250V, 5mm x 20mm | R703, R730-R732 | 121-02K7-2H4 | Resistor, Leaded, 2.7kΩ, 2W, 5% |
| F703, F706, F707 | 170-0163-SM | Fuse, Time Delay, 6.3A, 250V, 5mm x 20mm | R704, R729, R733 | 121-01K2-2H4 | Resistor, Leaded, 1.2kΩ, 2W, 5% |
| F704, F708 | 170-0105-SM | Fuse, Time Delay, 5A, 250V, 5mm x 20mm | R708, R709 | 121-0470-2H4 | Resistor, Leaded, 470Ω, 2W, 5% |
| F705 | 170-0107-SM | Fuse, Time Delay, 7A, 250V, 5mm x 20mm | R001-R008 | 120-0100-254 | Resistor, 0805 SMT, 100Ω, 0.25W, 5% |
| F710, F711, F712, F714 | 170-0104-SM | Fuse, Time Delay, 4A, 250V, 5mm x 20mm | R208, R800, R801, R803-R811 | U001 | Not Populated |
| F709 | 170-0103-SM | Fuse, Time Delay, 3A, 250V, 5mm x 20mm | U002, U003 | 141-0008-0S | Octal Bus XCVRs w/3-State Outputs, 74HC245, SOIC-20 SMT |
| F713 | 170-0102-SM | Fuse, Time Delay, 2A, 250V, 5mm x 20mm | U101-U112 | 141-0009-0S | Darlington Transistor Array, ULN2803A, SOIC-18 SMT, NPN |
| F1, F2 | 170-3201-FB | Fuse, Fast-Acting, 1A, 32V, Mini Blade | U200 | 141-0010-0S | Octal D-Type Flip-Flops w/3-State Outputs, 74HCT574, SOIC-20 SMT |
| F701-F714 | 22-8007-00 | Fuse Holder, 5mm x 20mm, SMD, 250V, 10A | U200 | 141-0011-0T | Microcontroller, 8-Bit, USB, 48MHz, PIC18F4550, PDIP-40 |
| F1,F2 | 22-8006-00 | Fuse Holder, Mini Blade, 500V, 20A | U201 | 31-3000-0T | DIP Socket, 40-pin, 2.54mm Pitch |
| K201 | 160-0001-0T | Relay, Reed, SPST, Normally Open, 10W, 0.5A | U601-U604 | 141-0012-0S | 4- to 16-Line Decoder, CMOS, CD74HCT154, SOIC-24 SMT |
| Q301-Q308, Q311-Q318, Q321-Q328, Q331-Q338, Q401-Q408, Q411-Q418, Q421-Q428, Q431-Q438, Q501-Q508, Q511-Q518 | 130-0000-0T | MOSFET, IRL540, N-Ch, TO-220AB, 100V, 36A | U800, U801 | 141-0013-0S | Shift Register, Serial/Parallel to Serial, 8-Bit, 74HCT165, SOIC-16 SMT |
| R201, R206, R300-R307, R320-R327, R340-R347, R360-R367, R400-R407, R420-R427, R440-R447, R460-R467, R400, R500-R507, R520-R527, R600-R607, R620-R627, R640-R647, R660-R667 | 120-0220-254 | Resistor, 0805 SMT, 220Ω, 0.25W, 5% | X1 | 160-0002-0S | Not Populated |
| R209, R802, R009-R017 R308-R315, R328-R335, R348-R355, R368-R375, R408-R415, R428-R435, R448-R455, R468-R475, R508-R515, R528-R535 R608-R615, R628-R635, R648-R655, R668-R675 | 120-04K7-254 | Resistor, 0805 SMT, 4.7kΩ, 0.25W, 5% | X800 | 31-2505-10 | Crystal, 8MHz, ATS08ASM-1E, SMT, 20pF, 30PPM |
| 120-001K-404 | | Resistor, 0805 SMT, 1kΩ, 0.4W, 5% | J104-J113 | 31-2504-09 | Header, Male, 10-pin, 3.96mm |
| 120-010K-254 | | Resistor, 0805 SMT, 10kΩ, 0.25W, 5% | J200, J201, J202 | 31-2501-07 | Header, Male, 9-pin, 2.54mm |
| | | | J203 | 31-2504-10 | Header, Male, 7-pin, Rt Angle, 2.54mm |
| | | | J601-J604 | 31-2506-06 | Header, Male, 10-pin, 2.54mm |
| | | | J701 | 31-2506-04 | Header, Male, 6-pin, .250" Centerline |
| | | | J702 | Not Populated | Header, Male, 4-pin, .250" Centerline |
| | | | J800, J802, J804 | 31-2507-00 | Receptacle, Mini USB 2.0, Type B, SMT |
| | | | JUSB | 31-2502-04 | Connector Header, Male, 4-pin, Power |
| | | | PWR1 | | |

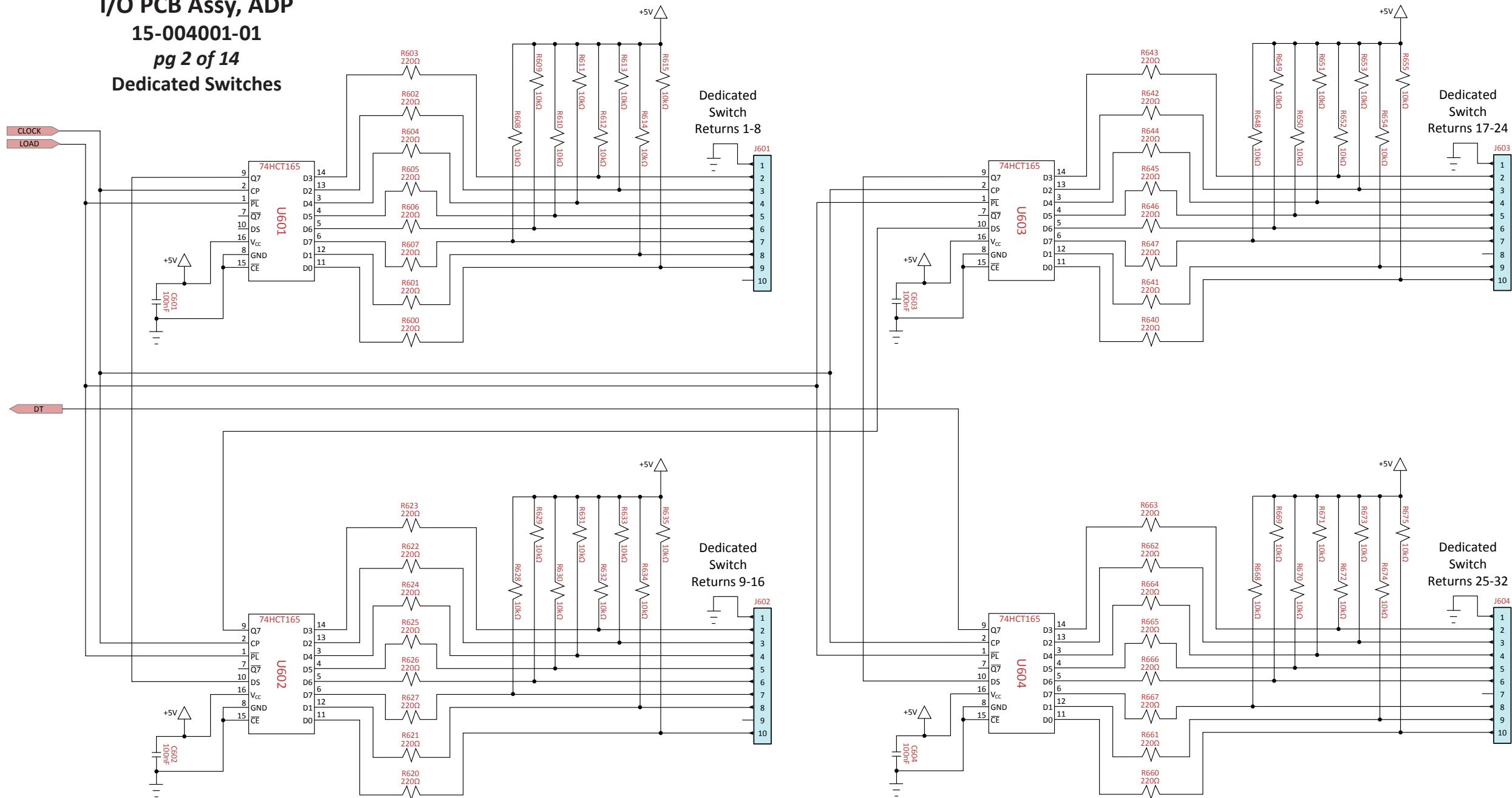


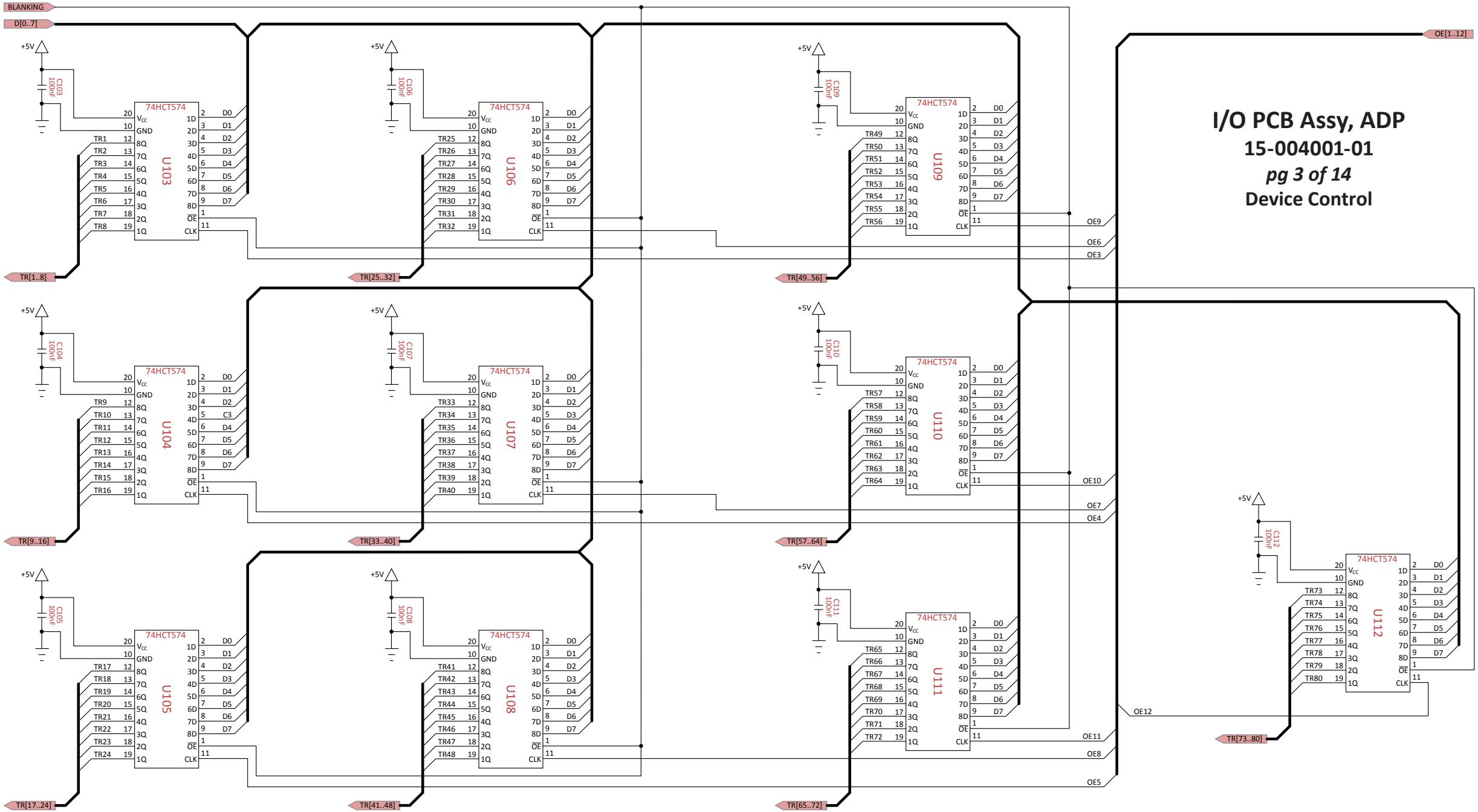
I/O PCB Assy, ADP

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Dedicated Switches



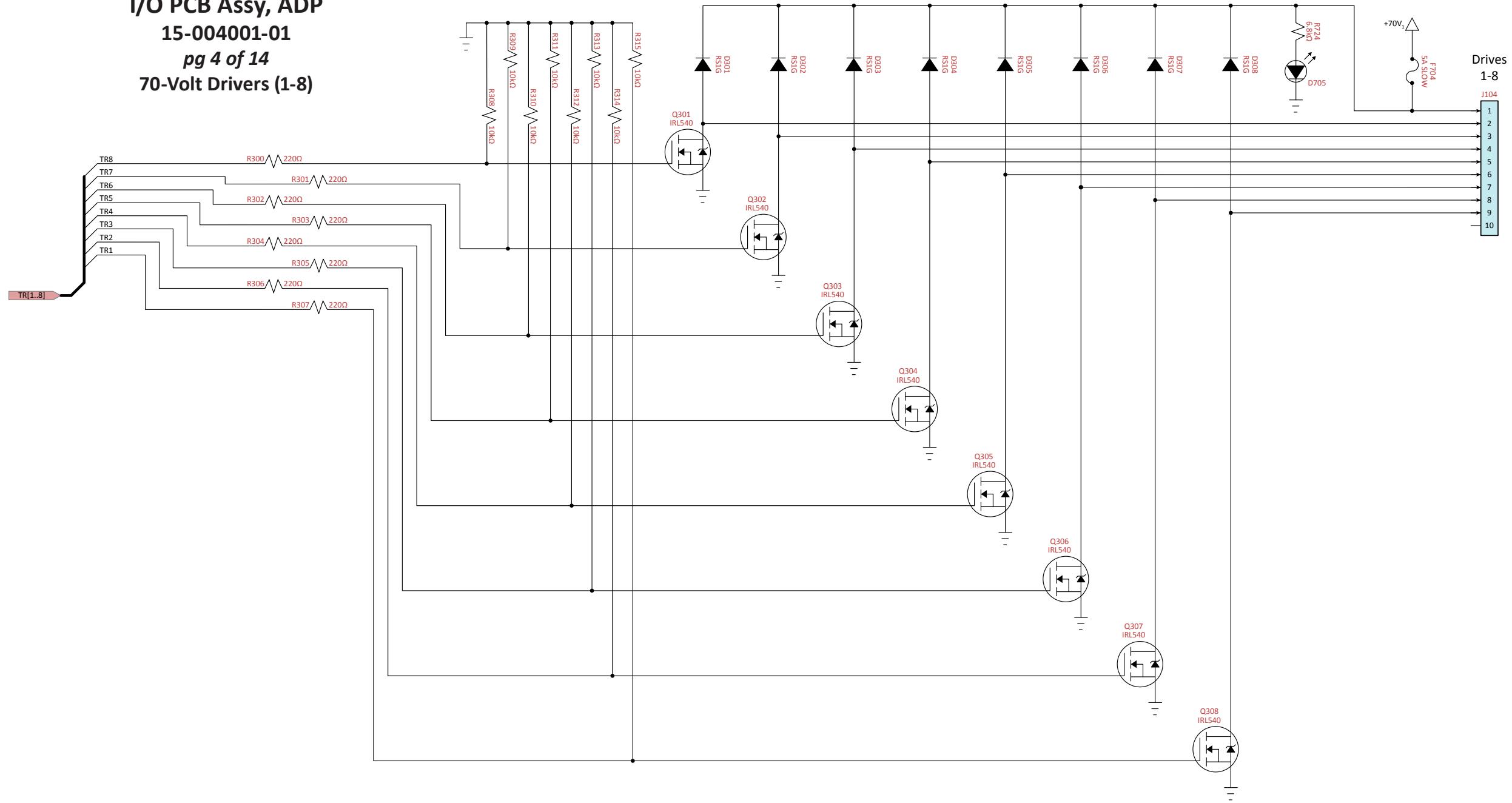


I/O PCB Assy, ADP

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70-Volt Drivers (1-8)

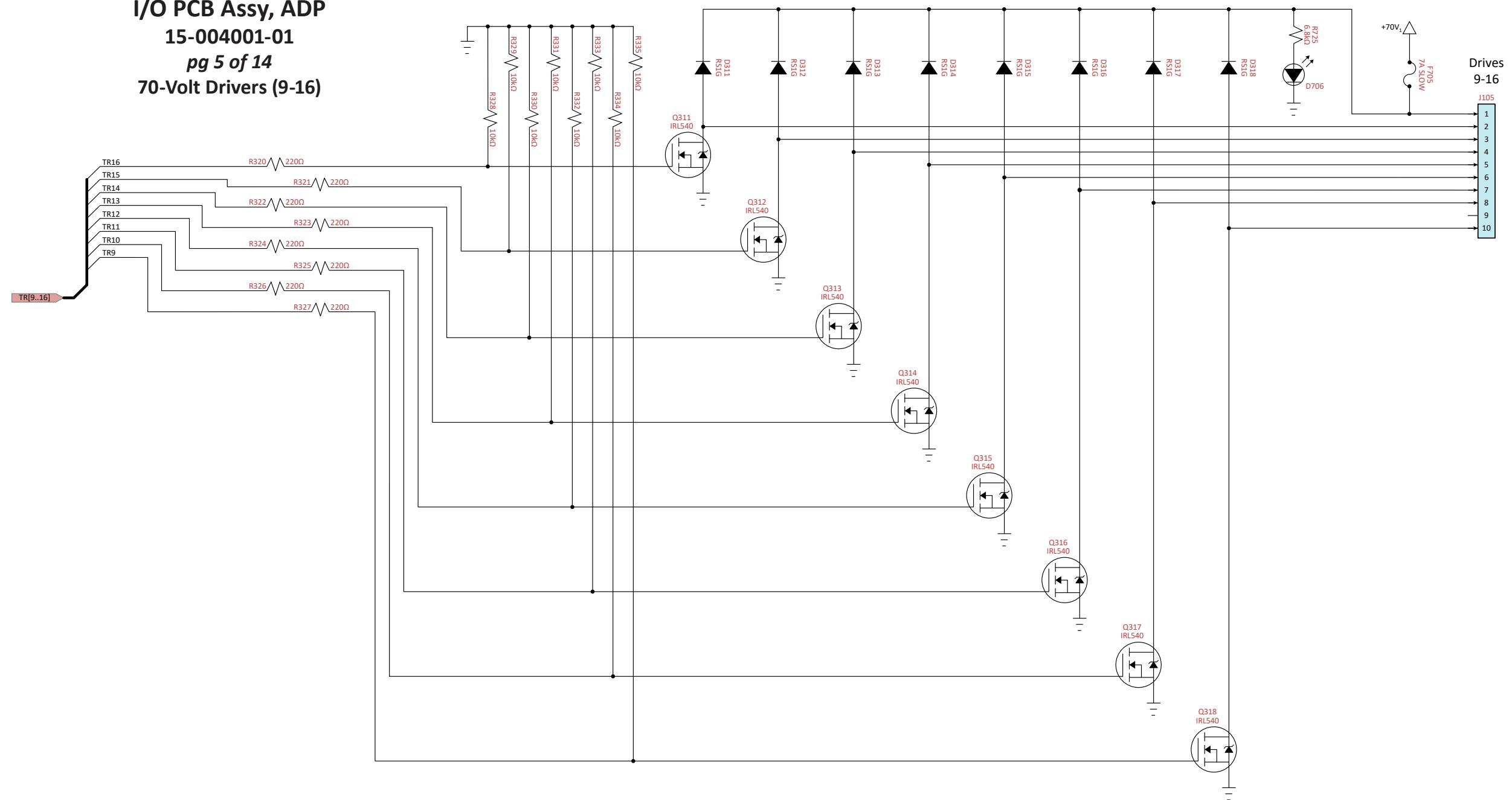


I/O PCB Assy, ADP

15-004001-01

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70-Volt Drivers (9-16)

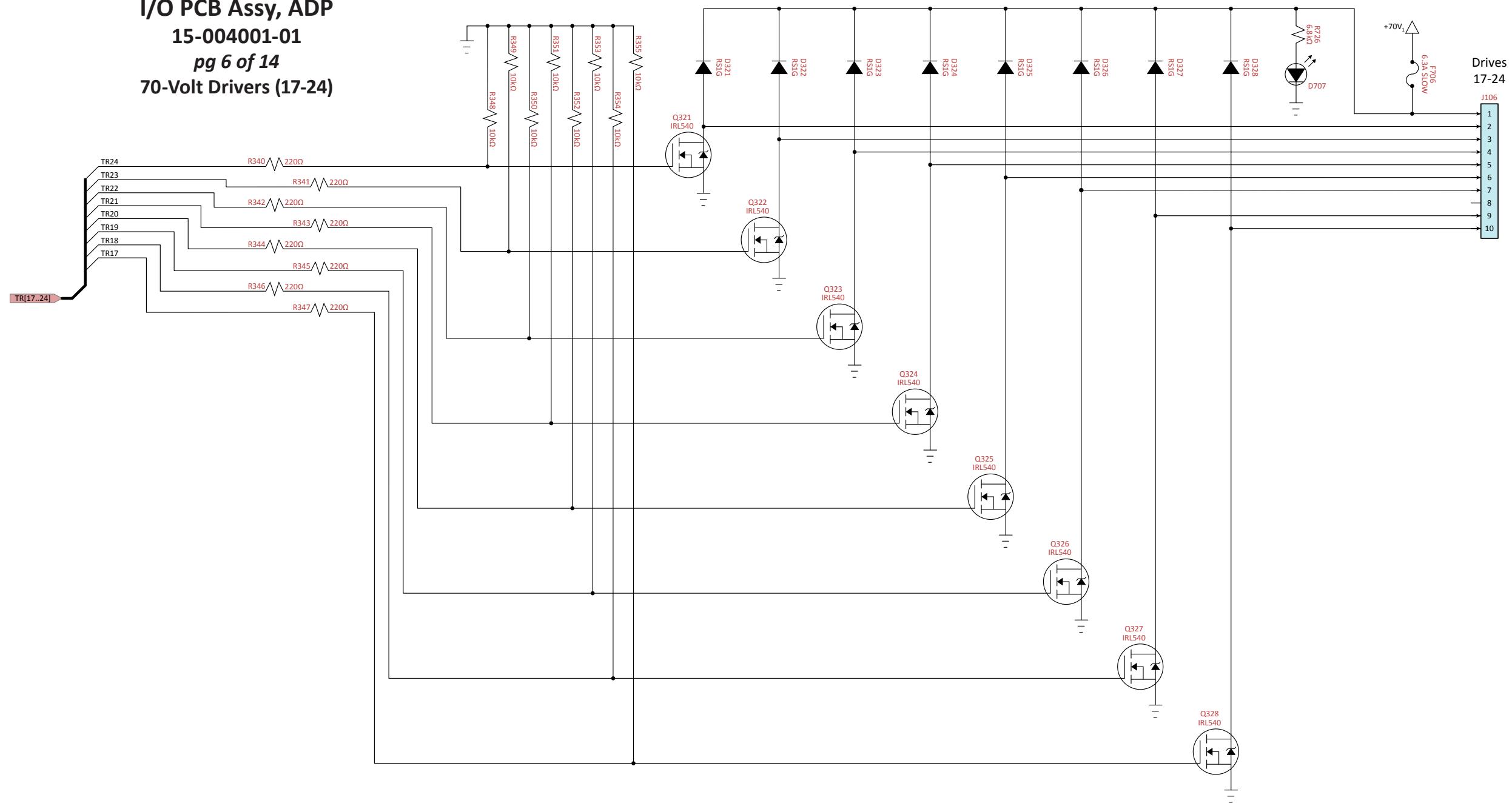


I/O PCB Assy, ADP

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70-Volt Drivers (17-24)

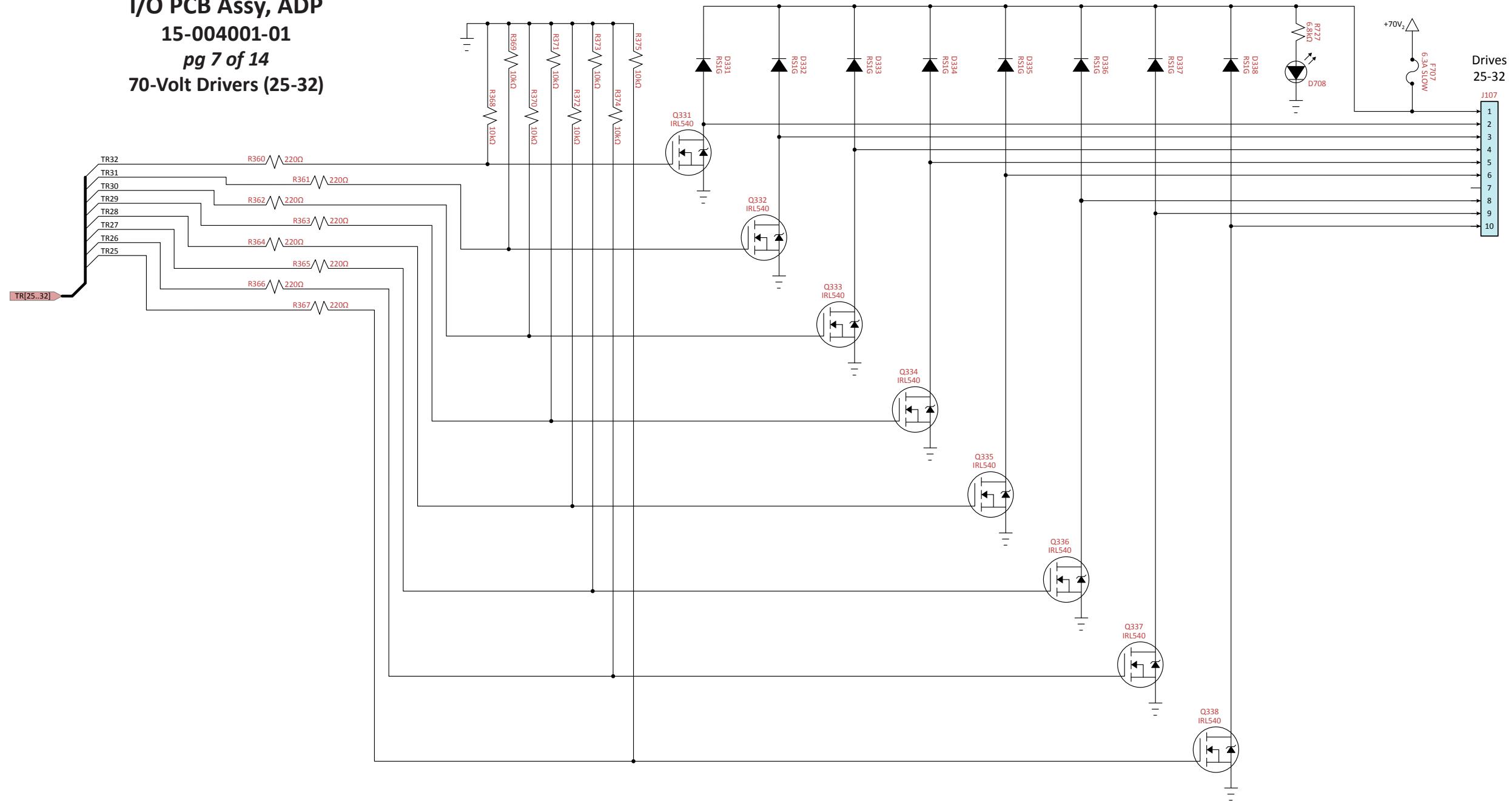


I/O PCB Assy, ADP

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70-Volt Drivers (25-32)

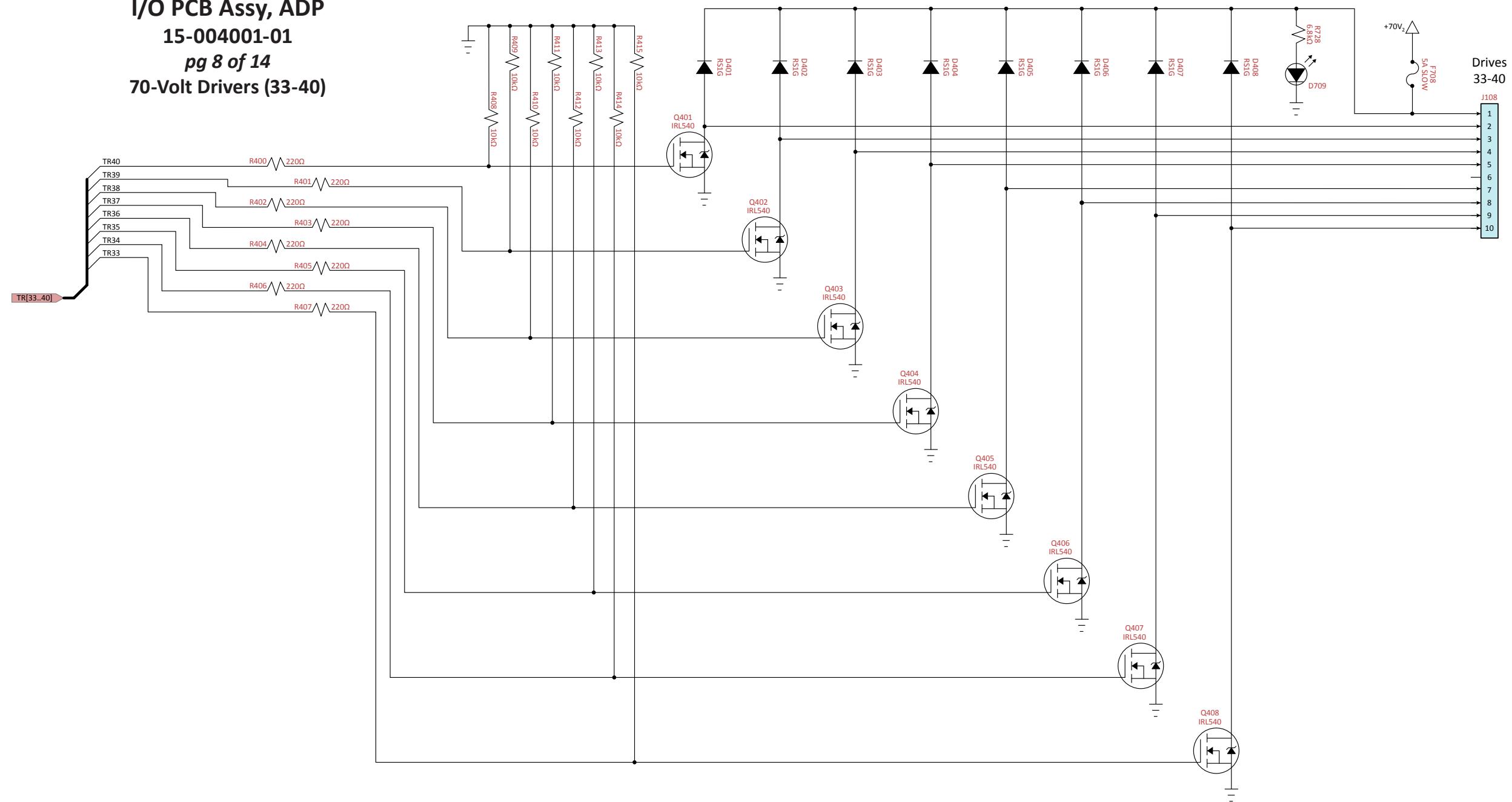


I/O PCB Assy, ADP

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70-Volt Drivers (33-40)

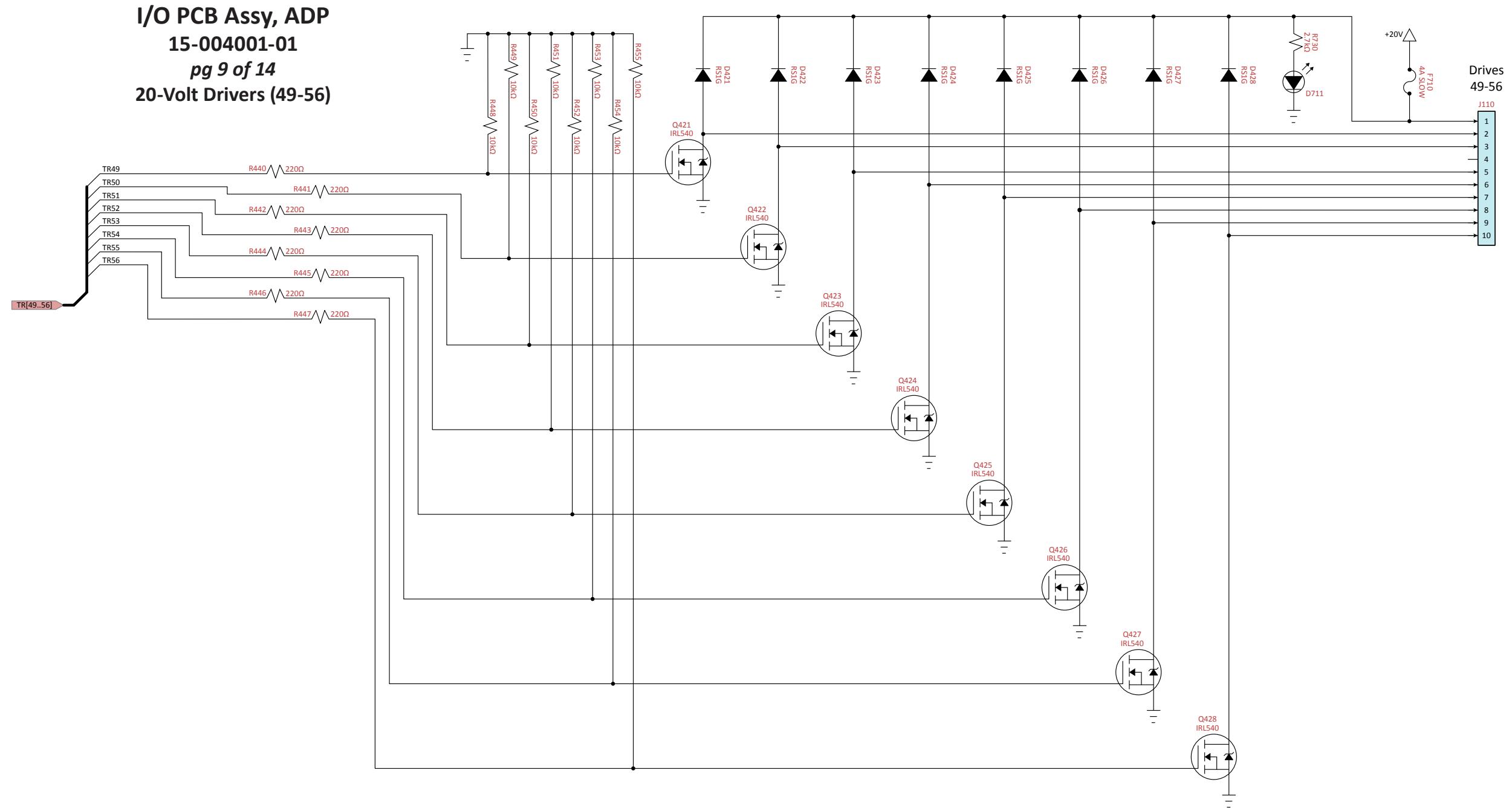


I/O PCB Assy, ADP

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20-Volt Drivers (49-56)

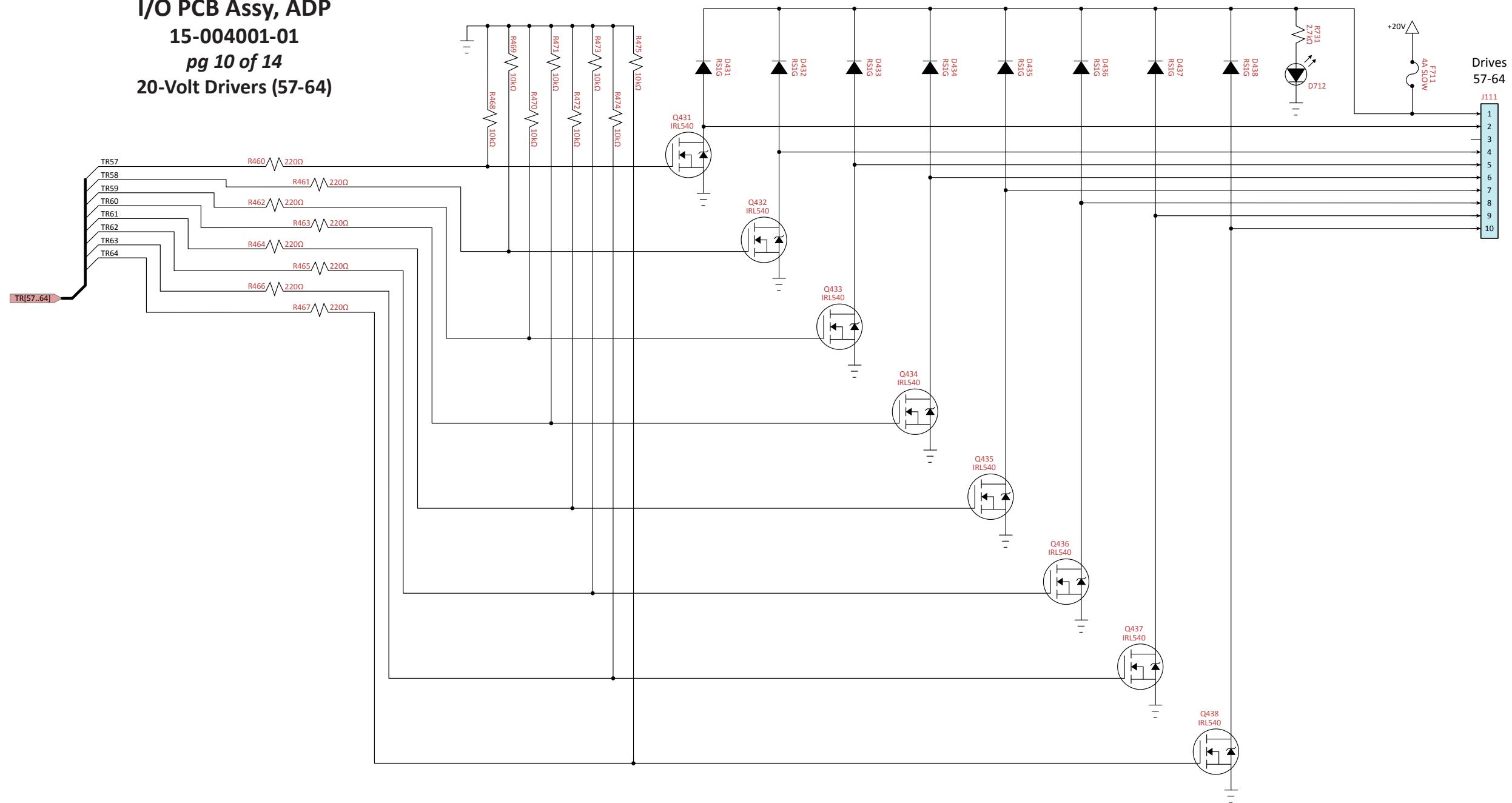


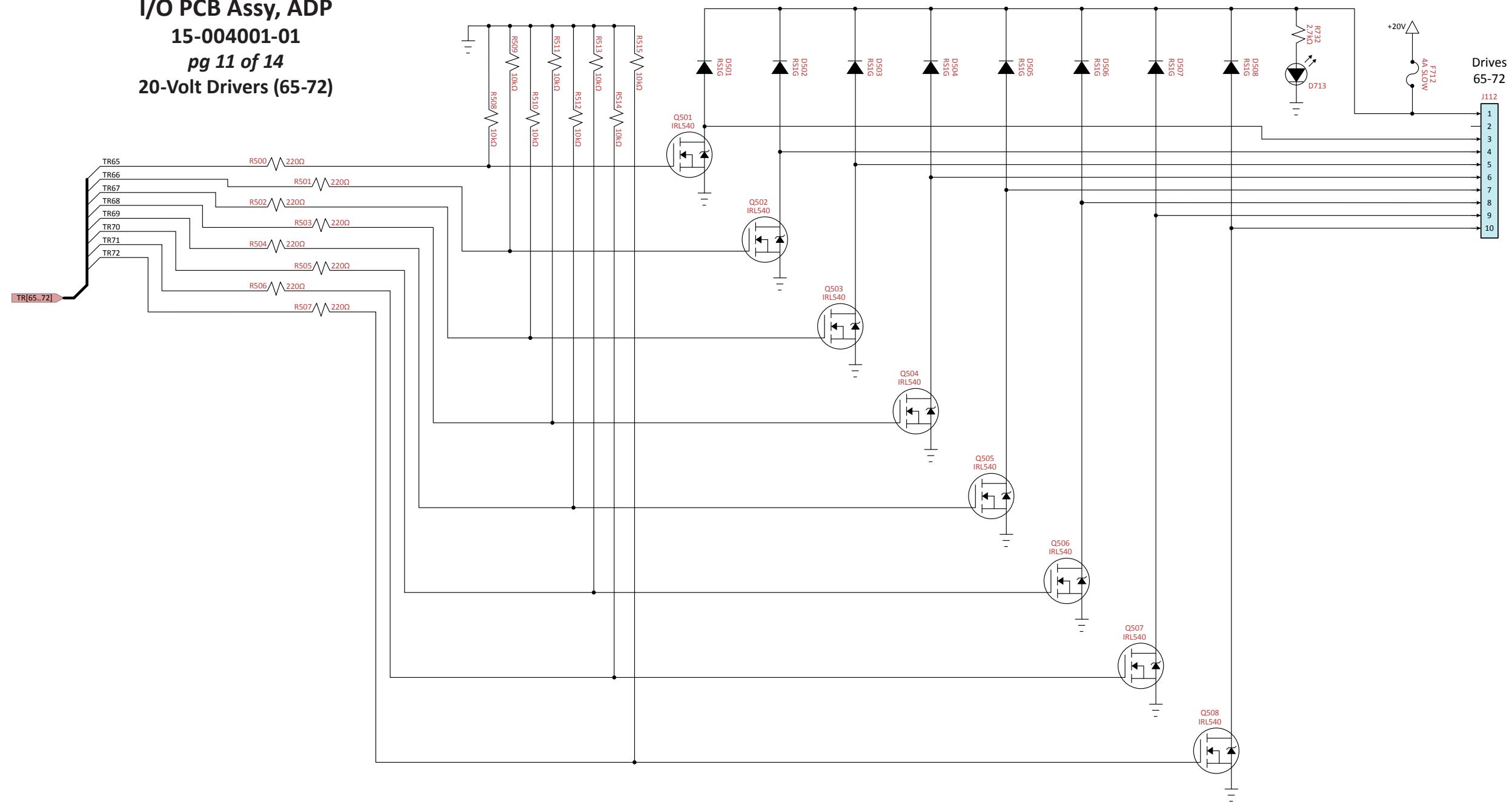
I/O PCB Assy, ADP

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20-Volt Drivers (57-64)



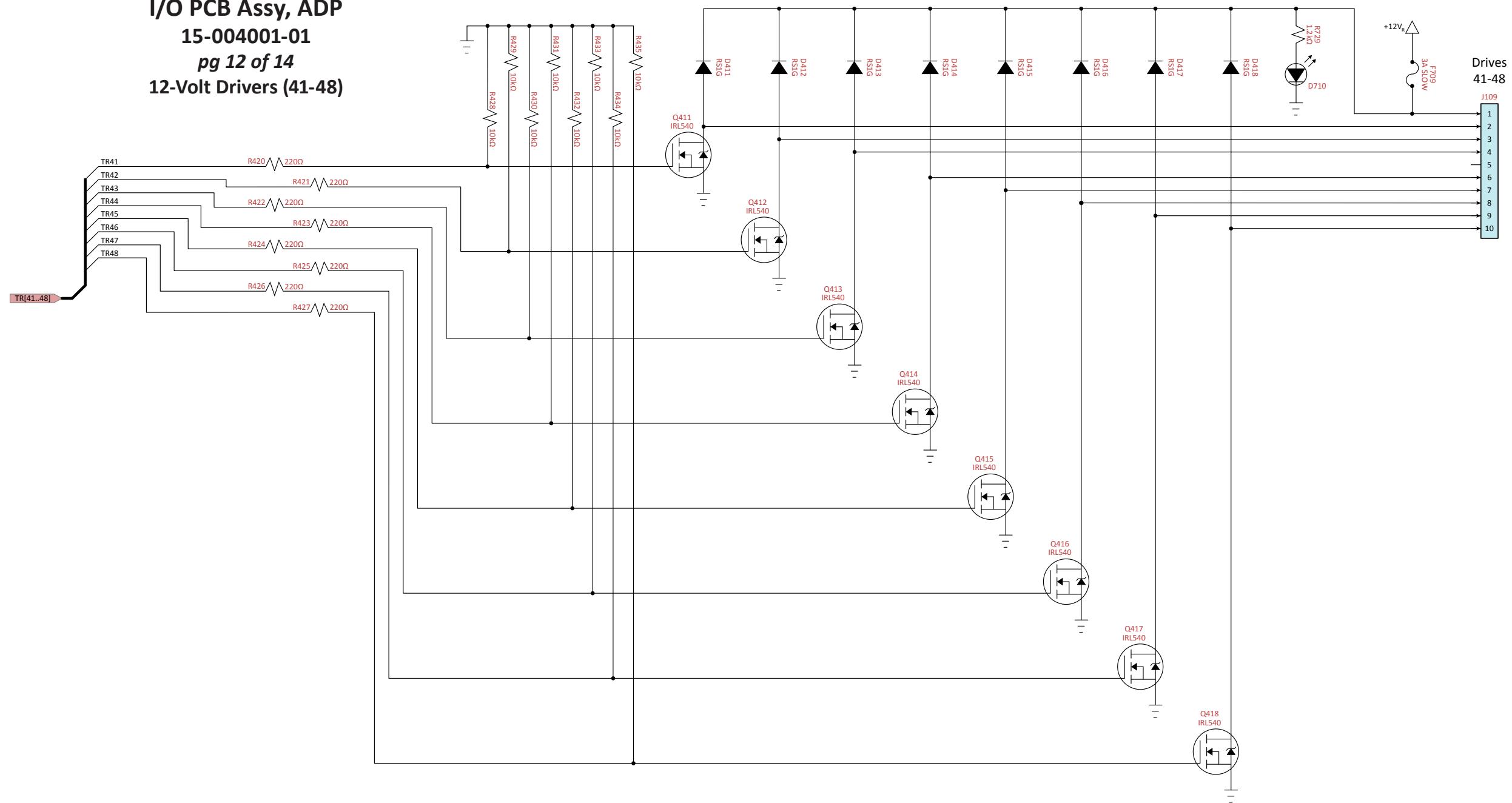
I/O PCB Assy, ADP**15-004001-01****pg 11 of 14****20-Volt Drivers (65-72)**

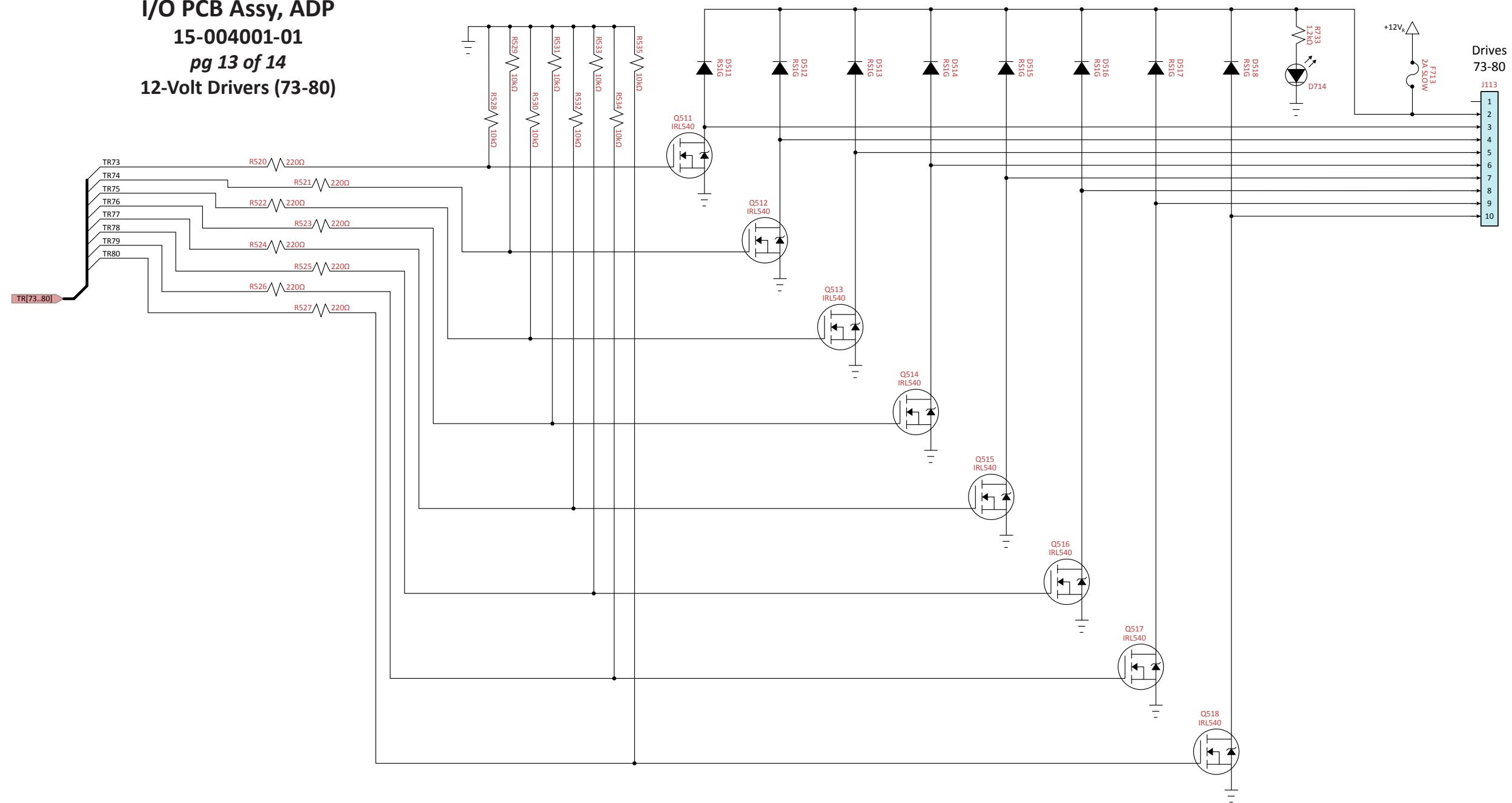
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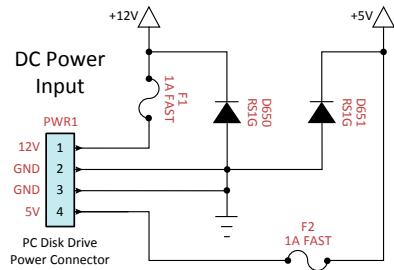
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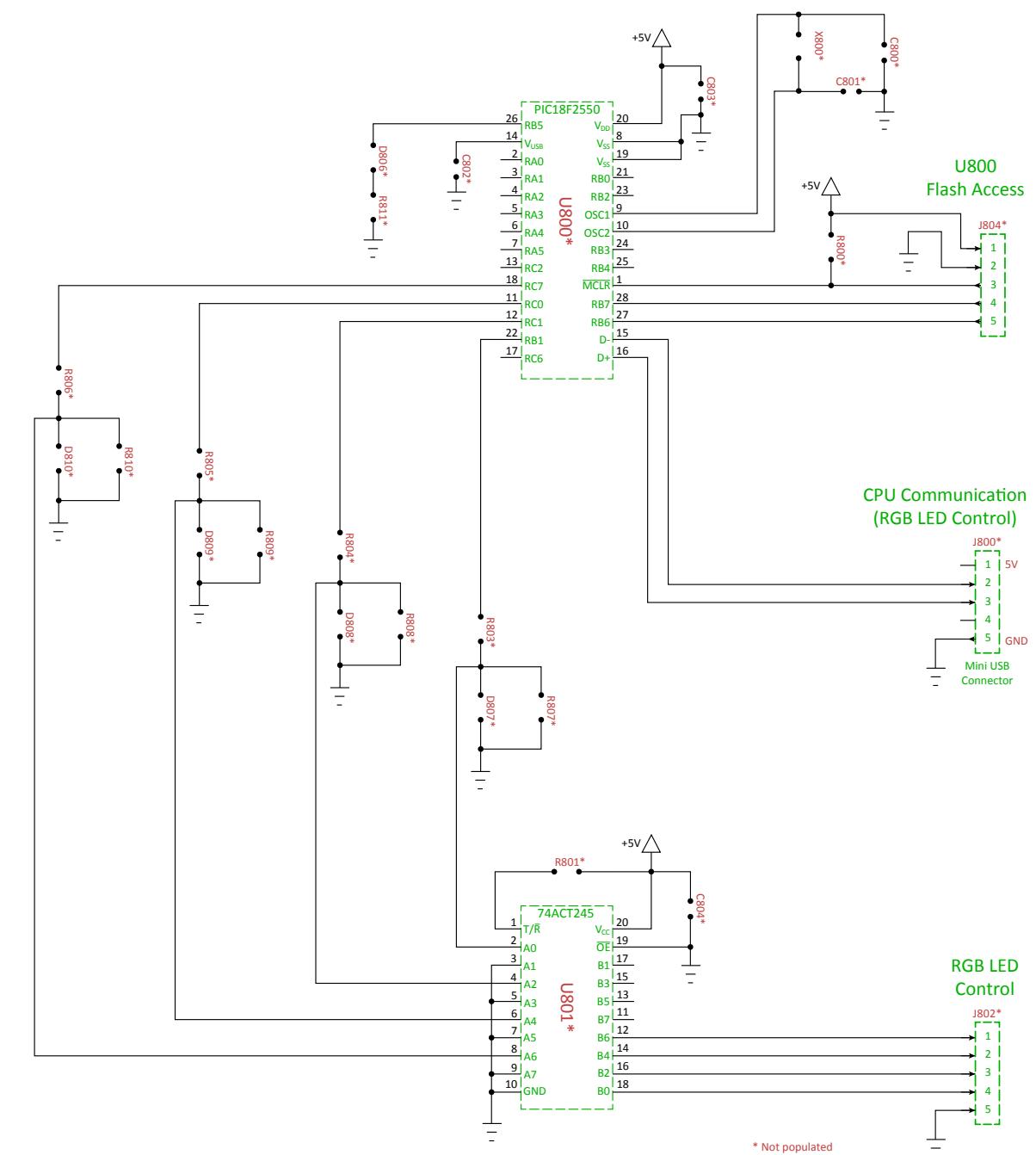
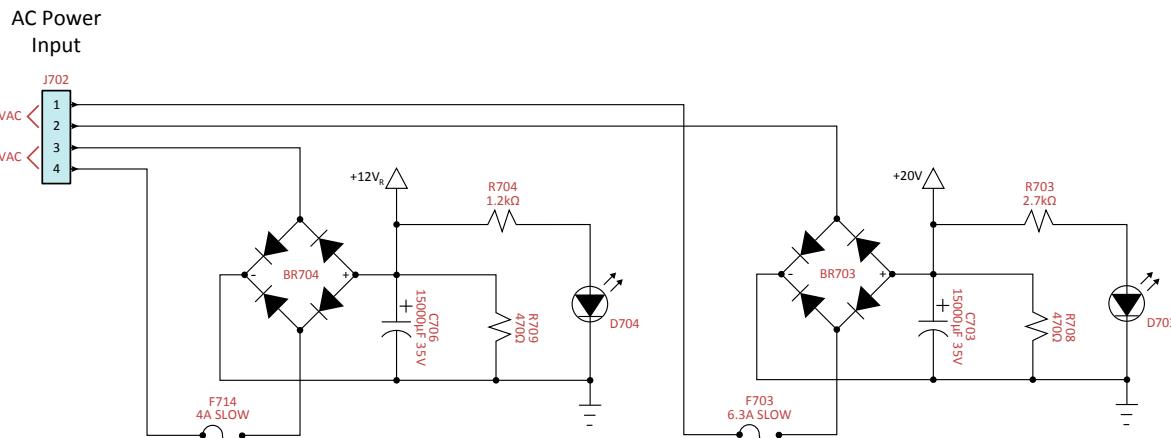
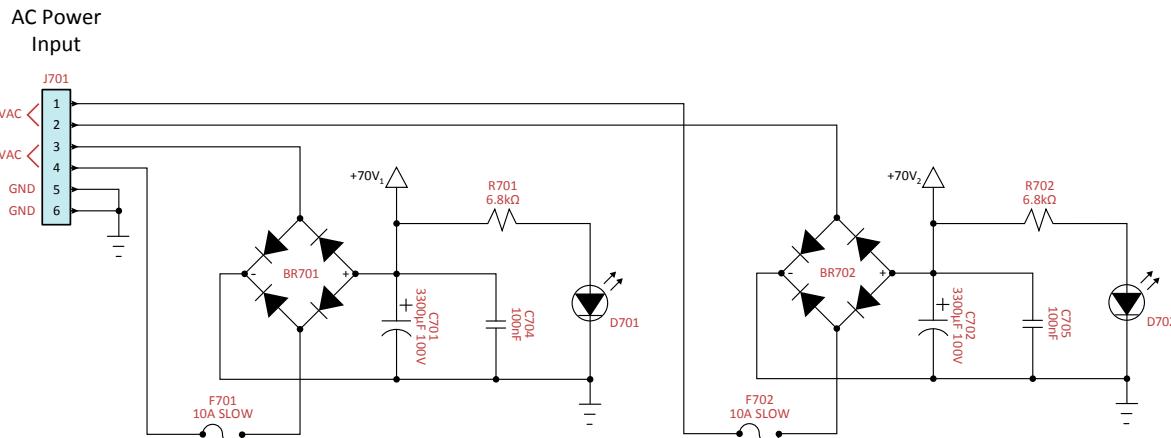
12-Volt Drivers (41-48)

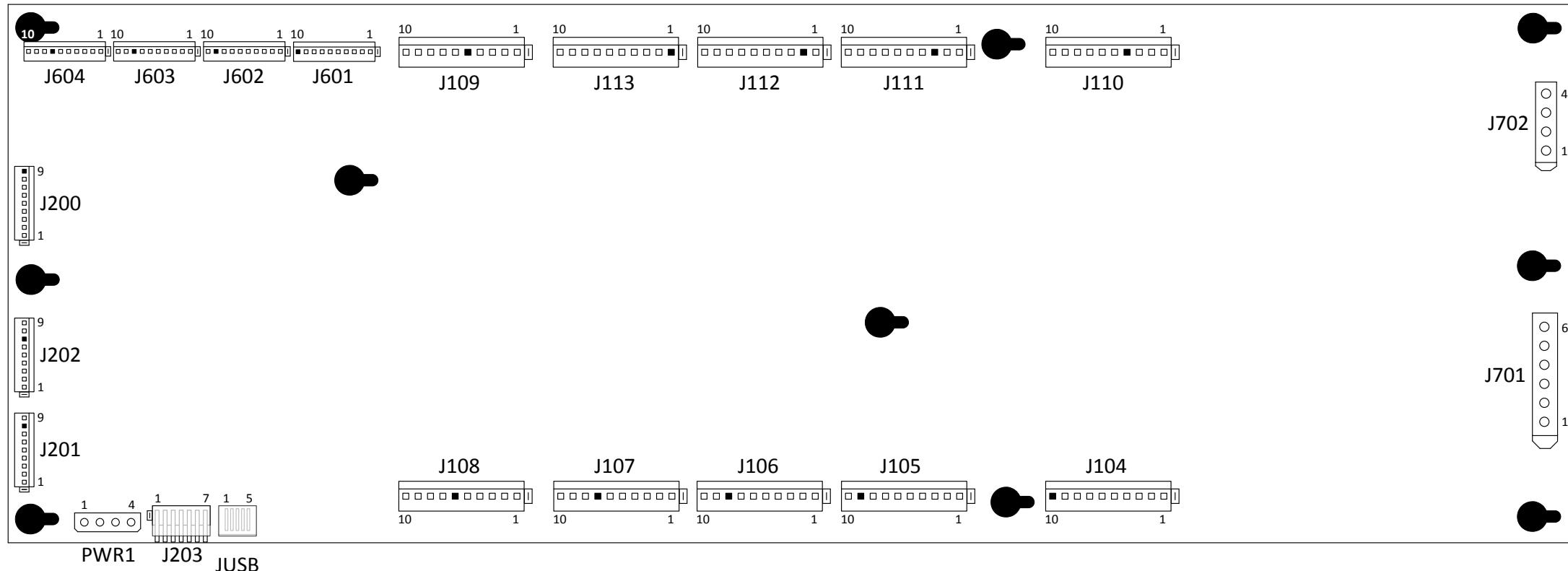


I/O PCB Assy, ADP**15-004001-01****pg 13 of 14****12-Volt Drivers (73-80)**



I/O PCB Assy, ADP
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Power Input/Rectification





I/O PCB Assy, All Drives Populated

15-004001-01

Connector Pin-outs

J104 70-Volt Coil Drives (1-8)

| | | |
|---------|---------|--|
| J104-1 | BRN | +70VDC supply to coils below |
| J104-2 | BRN-VIO | Not Used |
| J104-3 | BRN-BLU | Coil drive 7 [Knocker] |
| J104-4 | BRN-GRN | Coil drive 6 [Upper Slingshot] |
| J104-5 | BRN-YEL | Coil drive 5 [Tortuga VUK] |
| J104-6 | BRN-ORN | Coil drive 4 [Upper Pop Bumper] |
| J104-7 | BRN-RED | Coil drive 3 [Upper Middle Pop Bumper] |
| J104-8 | BRN-GRY | Coil drive 2 [Lower Middle Pop Bumper] |
| J104-9 | BRN-BLK | Coil drive 1 [Lower Pop Bumper] |
| J104-10 | Key | |

J105 70-Volt Coil Drives (9-16)

| | | |
|---------|---------|-------------------------------------|
| J105-1 | RED | +70VDC supply to coils below |
| J105-2 | RED-VIO | Not Used |
| J105-3 | RED-BLU | Coil drive 15 [Right Slingshot] |
| J105-4 | RED-GRN | Coil drive 14 [Auto-Launch] |
| J105-5 | RED-YEL | Coil drive 13 [5-Ball Trough VUK] |
| J105-6 | RED-ORN | Coil drive 12 [Right Flipper Hold] |
| J105-7 | RED-GRY | Coil drive 11 [Right Flipper Power] |
| J105-8 | RED-BRN | Coil drive 10 [Left Flipper Hold] |
| J105-9 | Key | |
| J105-10 | RED-BLK | Coil drive 9 [Left Flipper Power] |

J106 70-Volt Coil Drives (17-24)

| | | |
|---------|---------|--|
| J106-1 | ORN | +70VDC supply to coils below |
| J106-2 | ORN-VIO | Not Used |
| J106-3 | ORN-BLU | Not Used |
| J106-4 | ORN-GRN | Not Used |
| J106-5 | ORN-YEL | Coil drive 21 [Black Pearl Access VUK] |
| J106-6 | ORN-GRY | Coil drive 20 [Orbit Magnet] |
| J106-7 | ORN-RED | Coil drive 19 [Chapter Select Buried Magnet] |
| J106-8 | Key | |
| J106-9 | ORN-BRN | Coil drive 18 [5-Ball Lock Forks Retract] |
| J106-10 | ORN-BLK | Coil drive 17 [3-Ball Lock Forks Raise] |

J107 70-Volt Coil Drives (25-32)

| | | |
|---------|---------|--|
| J107-1 | TAN | +70VDC supply to coils/magnets below |
| J107-2 | TAN-VIO | Not Used |
| J107-3 | TAN-BLU | Not Used |
| J107-4 | TAN-GRN | Not Used |
| J107-5 | TAN-YEL | Not Used |
| J107-6 | TAN-ORN | Coil drive 28 [Upper Left Flipper Hold] |
| J107-7 | Key | |
| J107-8 | TAN-RED | Coil drive 27 [Upper Left Flipper Power] |
| J107-9 | TAN-BRN | Coil drive 26 [The Depths Scoop Eject] |
| J107-10 | TAN-BLK | Coil drive 25 [Left Slingshot] |

J108 70-Volt Coil Drives (33-40)

| | | |
|---------|---------|---|
| J108-1 | PNK | +70VDC supply to coils below |
| J108-2 | PNK-VIO | Not Used |
| J108-3 | PNK-BLU | Not Used |
| J108-4 | PNK-GRN | Not Used |
| J108-5 | PNK-YEL | Coil drive 37 [Black Pearl Cannon] |
| J108-6 | Key | |
| J108-7 | PNK-ORN | Coil drive 36 [Black Pearl Right Flipper Hold] |
| J108-8 | PNK-RED | Coil drive 35 [Black Pearl Right Flipper Power] |
| J108-9 | PNK-BRN | Coil drive 34 [Black Pearl Left Flipper Hold] |
| J108-10 | PNK-BLK | Coil drive 33 [Black Pearl Left Flipper Power] |

J109 12-Volt Coil Drives (41-48)

| | | |
|---------|---------|--|
| J109-1 | YEL | +12VDC supply to motors/lights below |
| J109-2 | YEL-BLK | Coil drive 41 [Pirate Spinning PB Motor] |
| J109-3 | YEL-BRN | Coil drive 42 [Barrel Spinning PB Motor] |
| J109-4 | YEL-RED | Coil drive 43 [Ramp LED Strip, RED] |
| J109-5 | Key | |
| J109-6 | YEL-ORN | Coil drive 44 [Ramp LED Strip, GRN] |
| J109-7 | YEL-GRY | Coil drive 45 [Ramp LED Strip, BLU] |
| J109-8 | YEL-GRN | Coil drive 46 [Spotlights (5 ea)] |
| J109-9 | YEL-BLU | Coil drive 47 [Black Pearl Mini PF Rock Motor] |
| J109-10 | YEL-VIO | Coil drive 48 [Black Pearl Mini PF Rock Relay] |

J110 20-Volt Coil Drives (49-56)

| | | |
|---------|---------|---|
| J110-1 | PLM | +20VDC supply to coils/magnets below |
| J110-2 | PLM-BLK | Coil drive 49 [Chapter Select Up Post] |
| J110-3 | PLM-BRN | Coil drive 50 [3-Ball Chest Lock Release] |
| J110-4 | Key | |
| J110-5 | PLM-RED | Coil drive 51 [Left Orbit Up Post] |
| J110-6 | PLM-ORN | Not Used |
| J110-7 | PLM-YEL | Not Used |
| J110-8 | PLM-GRN | Not Used |
| J110-9 | PLM-BLU | Coil drive 55 [Maelstrom Ramp Diverter] |
| J110-10 | PLM-GRY | Coil drive 56 [Left Turnaround Diverter] |

J111 20-Volt Coil Drives (57-64)

| | | |
|---------|---------|------------------------------|
| J111-1 | BLU | +20VDC supply to coils below |
| J111-2 | BLU-BLK | Not Used |
| J111-3 | Key | |
| J111-4 | BLU-BRN | Not Used |
| J111-5 | BLU-RED | Not Used |
| J111-6 | BLU-ORN | Not Used |
| J111-7 | BLU-YEL | Not Used |
| J111-8 | BLU-GRN | Not Used |
| J111-9 | BLU-GRY | Not Used |
| J111-10 | BLU-VIO | Not Used |

J112 -20-Volt Coil Drives (65-72)

| | | |
|---------|---------|---|
| J112-1 | VIO | +20VDC supply to coils below |
| J112-2 | Key | |
| J112-3 | VIO-BLK | Not Used |
| J112-4 | VIO-BRN | Not Used |
| J112-5 | VIO-RED | Not Used |
| J112-6 | VIO-ORN | Not Used |
| J112-7 | VIO-YEL | Not Used |
| J112-8 | VIO-GRN | Not Used |
| J112-9 | VIO-BLU | Not Used |
| J112-10 | VIO-GRY | Coil drive 72 [Black Pearl Cannon Load Door Lock] |

J113 12-Volt Coil Drives (73-80)

| | | |
|---------|------------|---|
| J113-1 | Key | |
| J113-2 | LT BLU | +12VDC supply to light below |
| J113-3 | LT BLU-BLK | Coil drive 73 [Shaker Motor] |
| J113-4 | LT BLU-BRN | Coil drive 74 [Topper Light] |
| J113-5 | LT BLU-RED | Coil drive 75 [Redemption Ticket Motor] |
| J113-6 | LT BLU-ORN | Coil drive 76 [Map Disc Motor] |
| J113-7 | LT BLU-YEL | Coil drive 77 [Map Disc Relay] |
| J113-8 | LT BLU-GRN | Not Used |
| J113-9 | LT BLU-GRY | Coil drive 79 [Start Button Light] |
| J113-10 | LT BLU-VIO | Coil drive 80 [Topper Motor Drive] |

J200 Matrixed Switches, Rows

| | | |
|--------|---------|-----------------------------|
| J200-1 | WHT-BLK | Row 1 to playfield switches |
| J200-2 | WHT-BRN | Row 2 to playfield switches |
| J200-3 | WHT-RED | Row 3 to playfield switches |
| J200-4 | WHT-ORN | Row 4 to playfield switches |
| J200-5 | WHT-YEL | Row 5 to playfield switches |
| J200-6 | WHT-GRN | Row 6 to playfield switches |
| J200-7 | WHT-BLU | Row 7 to playfield switches |
| J200-8 | WHT-VIO | Row 8 to playfield switches |
| J200-9 | Key | |

J201 Matrixed Switches, Columns (1-8)

| | | |
|--------|---------|--------------------------------|
| J201-1 | GRN-BLK | Column 1 to playfield switches |
| J201-2 | GRN-BRN | Column 2 to playfield switches |
| J201-3 | GRN-RED | Column 3 to playfield switches |
| J201-4 | GRN-ORN | Column 4 to playfield switches |
| J201-5 | GRN-YEL | Column 5 to playfield switches |
| J201-6 | GRN-GRY | Column 6 to playfield switches |
| J201-7 | GRN-BLU | Column 7 to playfield switches |
| J201-8 | Key | |
| J201-9 | GRN-VIO | Column 8 to playfield switches |

J202 Matrixed Switches, Columns (9-16)

| | | |
|--------|---------|---------------------------------|
| J202-1 | GRY-BLK | Column 9 to playfield switches |
| J202-2 | GRY-BRN | Column 10 to playfield switches |
| J202-3 | GRY-RED | Column 11 to playfield switches |
| J202-4 | GRY-ORN | Not Used |
| J202-5 | GRY-YEL | Not Used |
| J202-6 | GRY-GRN | Not Used |
| J202-7 | Key | |
| J202-8 | GRY-BLU | Not Used |
| J202-9 | GRY-VIO | Not Used |

J203 Serial Communications

| | |
|--------|----------|
| J203-1 | Not Used |
| J203-2 | Not Used |
| J203-3 | Not Used |
| J203-4 | Not Used |
| J203-5 | Not Used |
| J203-6 | Not Used |
| J203-7 | Not Used |

J601 Dedicated Switches (1-8)

| | | |
|---------|---------|---|
| J601-1 | BLK | Dedicated switch common (Ground) |
| J601-2 | BLK-YEL | Dedicated switch return 5 [Black Pearl Right Flipper EOS] |
| J601-3 | BLK-GRN | Not Used |
| J601-4 | BLK-ORN | Dedicated switch return 4 [Black Pearl Left Flipper EOS] |
| J601-5 | BLK-RED | Dedicated switch return 3 [Upper Left Flipper EOS] |
| J601-6 | BLK-BRN | Dedicated switch return 2 [Right Flipper EOS] |
| J601-7 | BLK-GRY | Dedicated switch return 1 [Left Flipper EOS] |
| J601-8 | BLK-BLU | Not Used |
| J601-9 | BLK-VIO | Not Used |
| J601-10 | Key | |

J602 Dedicated Switches (9-16)

| | | |
|---------|---------|---|
| J602-1 | BLK | Dedicated switch common (Ground) |
| J602-2 | YEL-GRY | Dedicated switch return 13 [Enter/Menu Button] |
| J602-3 | YEL-GRN | Dedicated switch return 14 [Up/Volume+ Button] |
| J602-4 | YEL-ORN | Dedicated switch return 12 [Right Flipper Switch, Upper] |
| J602-5 | YEL-RED | Dedicated switch return 11 [Right Flipper Switch, Lower] |
| J602-6 | YEL-BRN | Dedicated switch return 10 [Left Flipper Switch, Upper] |
| J602-7 | YEL-BLK | Dedicated switch return 9 [Left Flipper Switch, Lower] |
| J602-8 | YEL-BLU | Dedicated switch return 15 [Down/Volume- Button] |
| J602-9 | Key | |
| J602-10 | YEL-VIO | Dedicated switch return 16 [Escape/Service Credit Button] |

J603 Dedicated Switches (17-24)

| | | |
|---------|---------|--|
| J603-1 | BLK | Dedicated switch common (Ground) |
| J603-2 | BLU-YEL | Dedicated switch return 21 [5th Coin Slot Switch] |
| J603-3 | BLU-GRN | Dedicated switch return 22 [Ticket Mech Notch Switch] |
| J603-4 | BLU-ORN | Dedicated switch return 20 [4th Coin Slot Switch] |
| J603-5 | BLU-RED | Dedicated switch return 19 [Center Dollar Bill Acceptor] |
| J603-6 | BLU-BRN | Dedicated switch return 18 [Right Coin Switch] |
| J603-7 | BLU-BLK | Dedicated switch return 17 [Left Coin Switch] |
| J603-8 | Key | |
| J603-9 | BLU-GRY | Not Used |
| J603-10 | BLU-VIO | Not Used |

J604 Dedicated Switches (25-32)

| | | |
|---------|---------|--|
| J604-1 | BLK | Dedicated switch common (Ground) |
| J604-2 | VIO-YEL | Dedicated switch return 29 [Action Button] |
| J604-3 | VIO-GRN | Dedicated switch return 30 [Headphone Panel Volume Down] |
| J604-4 | VIO-ORN | Not Used |
| J604-5 | VIO-RED | Dedicated switch return 27 [Plumb Bob Tilt] |
| J604-6 | VIO-BRN | Dedicated switch return 26 [Coin Door Open] |
| J604-7 | Key | |
| J604-8 | VIO-BLK | Dedicated switch return 25 [Start Button] |
| J604-9 | VIO-BLU | Dedicated switch return 31 [Headphone Panel Volume Up] |
| J604-10 | VIO-GRY | Dedicated switch return 32 [Headphone Jack Sense] |

J701 AC Power Input (High)

| | | |
|--------|-----|---|
| J701-1 | RED | 49VAC from transformer (across RED lines) |
| J701-2 | RED | 49VAC from transformer (across RED lines) |
| J701-3 | BLU | 49VAC from transformer (across BLU lines) |
| J701-4 | BLU | 49VAC from transformer (across BLU lines) |
| J701-5 | GRN | Chassis Ground |
| J701-6 | GRN | Chassis Ground |

J702 AC Power Input (Low)

| | | |
|--------|-----|---|
| J702-1 | YEL | 18VAC from transformer (across YEL lines) |
| J702-2 | YEL | 18VAC from transformer (across YEL lines) |
| J702-3 | GRY | 10VAC from transformer (across GRY lines) |
| J702-4 | GRY | 10VAC from transformer (across GRY lines) |

J800 CPU Communication

Not Used (Not Populated)

J802 RGB LED Control

Not Used (Not Populated)

J804 Flash Programming Access

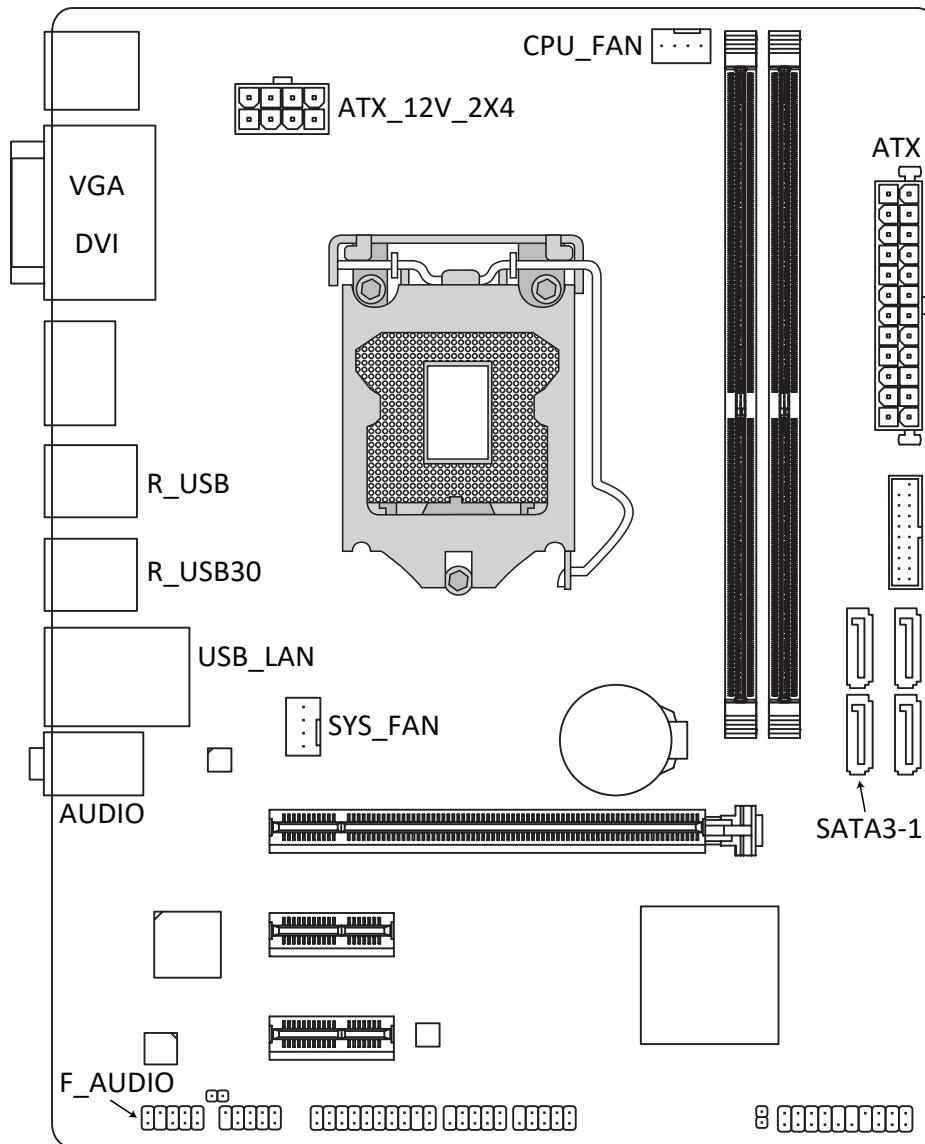
Not Used (Not Populated)

JUSB CPU Communication (Switch Monitoring/Device Control)

Mini USB cable to CPU Board USB connector

PWR1 DC Power Input

| | | |
|--------|-----|----------------------------|
| PWR1-1 | YEL | +12VDC from ATX Pwr Supply |
| PWR1-2 | BLK | Ground from ATX Pwr Supply |
| PWR1-3 | BLK | Ground from ATX Pwr Supply |
| PWR1-4 | RED | +5VDC from ATX Pwr Supply |



CPU Board, GA-H110M-S2H-GSM

15-000000-03

Connector Pin-outs

ATX_12V_2X4 DC Power Input

| | | |
|---------------|----------|----------------------------|
| ATX_12V_2X4-1 | BLK | Ground from ATX Pwr Supply |
| ATX_12V_2X4-2 | BLK | Ground jumpered from pin 1 |
| ATX_12V_2X4-3 | YEL-BLK | +12VDC from ATX Pwr Supply |
| ATX_12V_2X4-4 | YEL-BLK | +12VDC jumpered from pin 3 |
| ATX_12V_2X4-5 | Not Used | |
| ATX_12V_2X4-6 | Not Used | |
| ATX_12V_2X4-7 | Not Used | |
| ATX_12V_2X4-8 | Not Used | |

CPU_FAN CPU Fan Power

Primary connection for CPU fan (on Processor Board)

SYS_FAN System Fan Power

| | | |
|-----------|----------|-----------------------|
| SYS_FAN-1 | BLK | Ground to backbox fan |
| SYS_FAN-2 | RED | +12VDC to backbox fan |
| SYS_FAN-3 | Not Used | |
| SYS_FAN-4 | Not Used | |

ATX DC Power Input

| | | |
|--------|----------|--|
| ATX-1 | ORN | +3.3VDC from ATX Pwr Supply |
| ATX-2 | ORN | +3.3VDC from ATX Pwr Supply |
| ATX-3 | BLK | Ground from ATX Pwr Supply |
| ATX-4 | RED | +5VDC from ATX Pwr Supply |
| ATX-5 | BLK | Ground from ATX Pwr Supply |
| ATX-6 | RED | +5VDC from ATX Pwr Supply |
| ATX-7 | BLK | Ground from ATX Pwr Supply |
| ATX-8 | GRY | Power OK signal from ATX Pwr Supply |
| ATX-9 | VIO | +5VDC Standby from ATX Pwr Supply |
| ATX-10 | YEL | +12VDC from ATX Pwr Supply |
| ATX-11 | ORN | +3.3VDC from ATX Pwr Supply |
| ATX-12 | BLU | -12VDC from ATX Pwr Supply |
| ATX-13 | BLK | Ground from ATX Pwr Supply |
| ATX-14 | GRN | Power Supply ON signal from ATX Pwr Supply |
| ATX-15 | BLK | Ground from ATX Pwr Supply |
| ATX-16 | BLK | Ground from ATX Pwr Supply |
| ATX-17 | BLK | Ground from ATX Pwr Supply |
| ATX-18 | Not Used | |
| ATX-19 | RED | +5VDC from ATX Pwr Supply |
| ATX-20 | RED | +5VDC from ATX Pwr Supply |

SATA3-1 SATA Data Input/Output

SATA cable to solid state hard drive

AUDIO Audio Output

3.5mm audio cable to Sound Amplifier Board, J102

F_AUDIO Audio Output

| | | |
|------------|----------|---|
| F_AUDIO-1 | Not Used | |
| F_AUDIO-2 | BLK-BRN | Audio ground to Cabinet HP Board, J101-2 |
| F_AUDIO-3 | Not Used | |
| F_AUDIO-4 | Not Used | |
| F_AUDIO-5 | BLK-YEL | Right audio channel to Cabinet HP Board, J101-5 |
| F_AUDIO-6 | Not Used | |
| F_AUDIO-7 | Not Used | |
| F_AUDIO-8 | Not Used | |
| F_AUDIO-9 | BLK-VIO | Left audio channel to Cabinet HP Board, J101-9 |
| F_AUDIO-10 | Not Used | |

VGA Video Output

VGA cable to Compass LCD monitor

DVI Video Output

DVI/HDMI adapter cable to 27" LCD backbox monitor

R_USB USB 2.0 Ports (2)

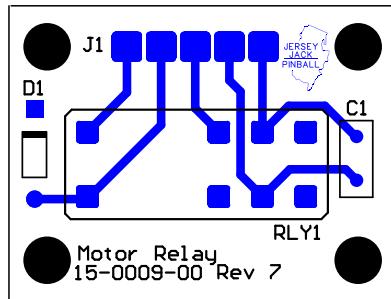
Mini USB cable to I/O Board, JUSB
Mini USB cable to BAG Controller Board, J101

R_USB30 USB 3.0 Ports (2)

POTC Game Security Dongle
USB extension cable to front of cabinet (inside coin door)

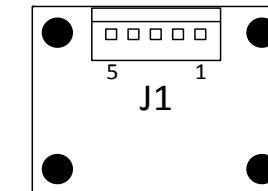
USB_LAN USB 2.0 Ports (2) & Ethernet Connection (1)

USB: USB cable to camera (inside backbox)
Not Used
Ethernet Connection: Not Used



Motor Relay Board 15-000009-00

| Component(s) | Part Number | Description |
|--------------|--------------|---|
| C1 | 101-104K-100 | Capacitor, MLCC, Leaded, 0.1 μ F, 100V, 10% |
| D1 | 110-0002-0T | Diode, 1N4004, 400V, 1A |
| RLY1 | 160-0000-0T | Relay, PCB, DPDT, 12VDC, 8A |
| J1 | 31-2505-05 | Header, Male, 5-Pin, 3.96mm |

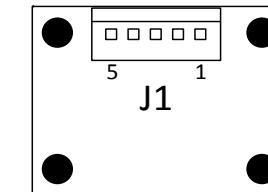
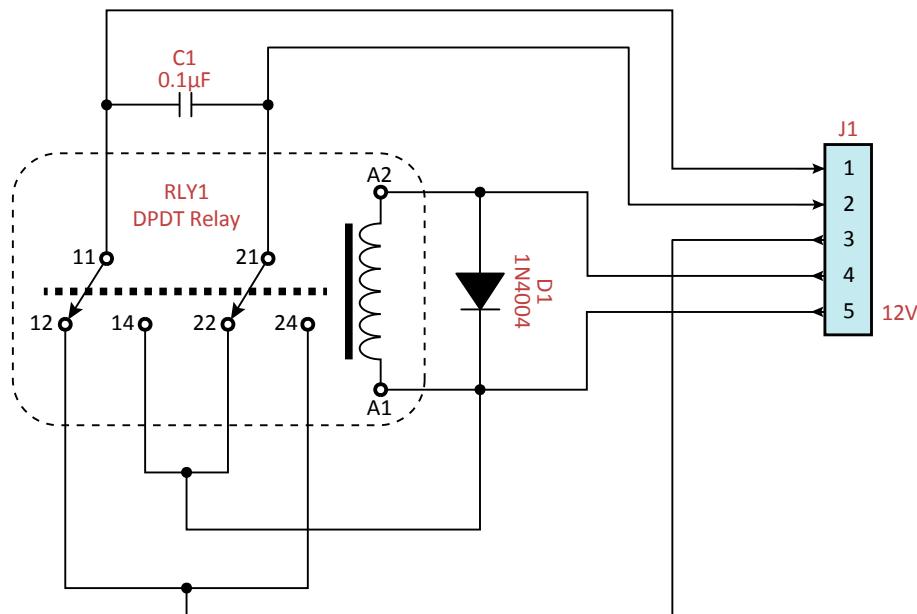


Black Pearl Motor Relay Board, 15-000009-00 Connector Pin-outs

J1 Black Pearl PF Rock Motor Control

| | | |
|------|---------|---|
| J1-1 | RED | To Black Pearl PF Rock Motor |
| J1-2 | BLK | To Black Pearl PF Rock Motor |
| J1-3 | YEL-BLU | Black Pearl PF Rock Motor drive from I/O Board, J109-9 |
| J1-4 | YEL-VIO | Black Pearl PF Rock Relay drive from I/O Board, J109-10 |
| J1-5 | YEL | +12VDC from I/O Board, J109-1 |

Motor Relay Board 15-000009-00



Spinning Map Motor Relay Board, 15-000009-00 Connector Pin-outs

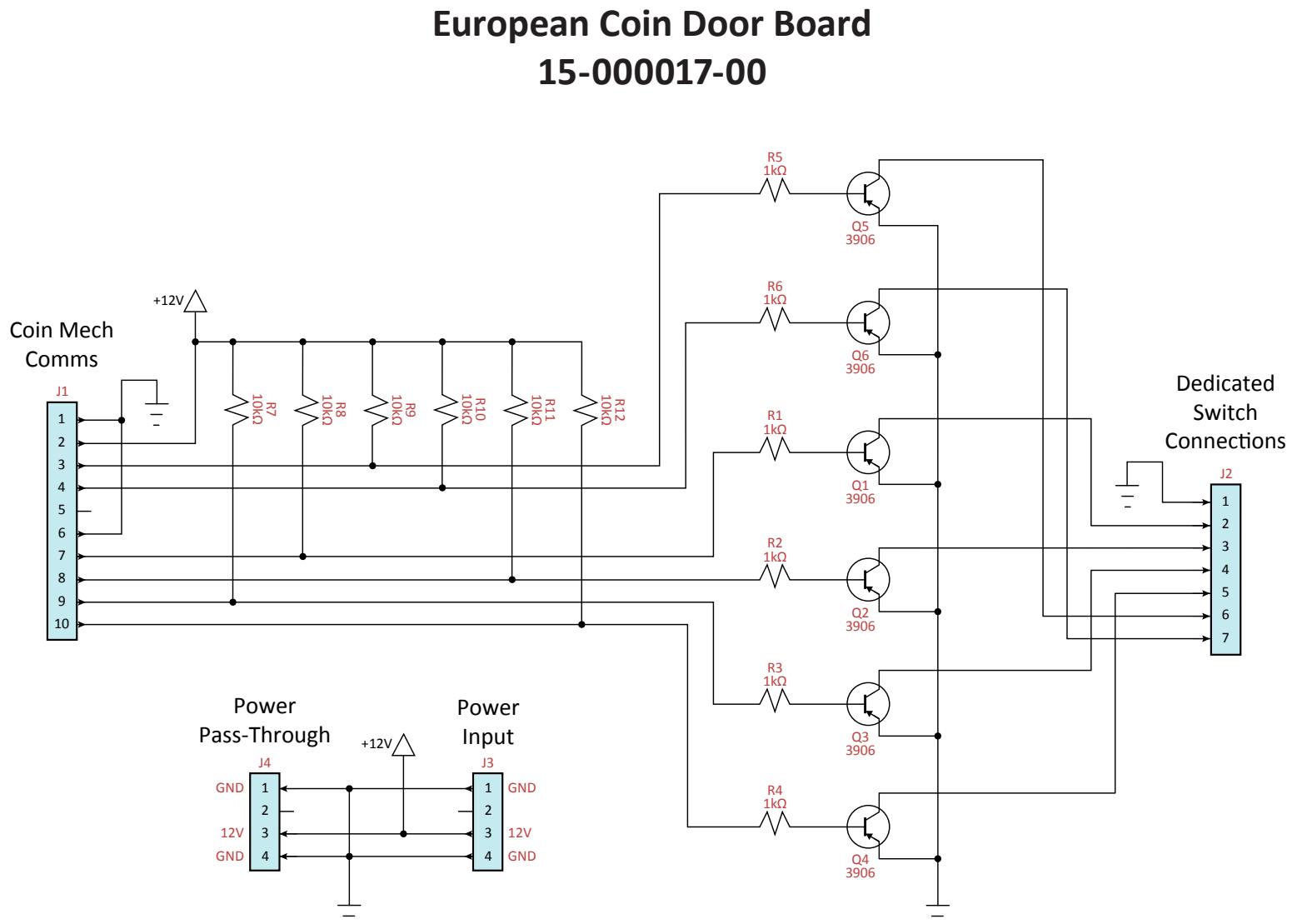
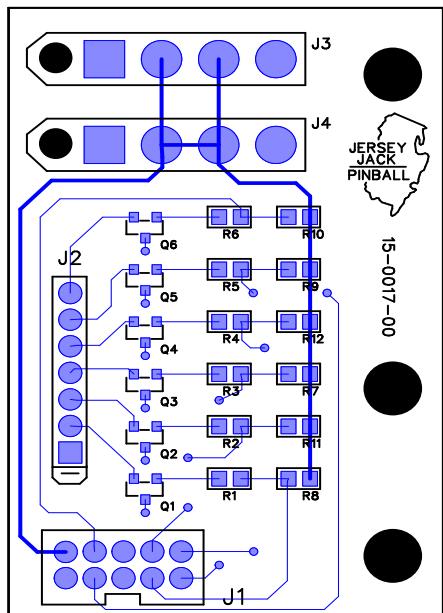
J1 Spinning Map Motor Control

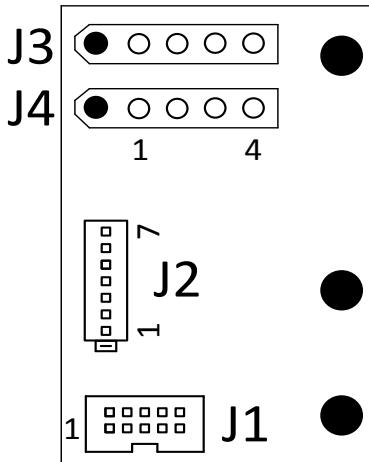
| | | |
|------|------------|---|
| J1-1 | RED | To Spinning Map Motor |
| J1-2 | BLK | To Spinning Map Motor |
| J1-3 | LT BLU-ORN | Spinning Map Motor drive from I/O Board, J113-6 |
| J1-4 | LT BLU-YEL | Spinning Map Relay drive from I/O Board, J113-7 |
| J1-5 | LT BLU | +12VDC from I/O Board, J113-2 |

European Coin Door Board

15-000017-00

| Component(s) | Part Number | Description |
|--------------|--------------|--|
| Q1-Q6 | 131-0001-0S | Transistor, 3906, SOT-23 SMT, PNP |
| R1-R6 | 120-1K00-124 | Resistor, 0805 SMT, 1kΩ, 0.125W, 5% |
| R7-R12 | 120-10K0-124 | Resistor, 0805 SMT, 10kΩ, 0.125W, 5% |
| J1 | 31-2513-10 | Connector Header, Male, 10-pin, 2 Rows, 2.54mm |
| J2 | 31-2504-07 | Header, Male, 7-pin, 2.54mm |
| J3, J4 | 31-2512-04 | Connector Header, Male, 4-pin, 5.03mm |





European Coin Door Board

15-000017-00

Connector Pin-outs

J1 Coin Mech Comms

| | |
|---------------------|----------------|
| 10-pin Ribbon cable | |
| J1-1 -> | |
| J1-2 -> | |
| J1-3 -> | |
| J1-4 -> | Communications |
| J1-5 -> | with coin |
| J1-6 -> | mechanisms |
| J1-7 -> | in coin door |
| J1-8 -> | |
| J1-9 -> | |
| J1-10 -> | |

J2 Dedicated Switch Connections

| | | |
|------|---------|---|
| J2-1 | BLK | Dedicated switch common (Ground), I/O Board, J603-1 |
| J2-2 | BLU-BLK | Dedicated switch return 17 [Left Coin Switch], I/O Board, J603-7 |
| J2-3 | BLU-BRN | Dedicated switch return 18 [Right Coin Switch], I/O Board, J603-6 |
| J2-4 | BLU-RED | Dedicated switch return 19 [Center Dollar Bill Acceptor], I/O Board, J603-5 |
| J2-5 | BLU-ORN | Dedicated switch return 20 [4th Coin Slot Switch], I/O Board, J603-4 |
| J2-6 | BLU-YEL | Dedicated switch return 21 [5th Coin Slot Switch], I/O Board, J603-2 |
| J2-7 | BLU-GRN | Dedicated switch return 22 [Ticket Mech Notch Switch], I/O Board, J603-3 |

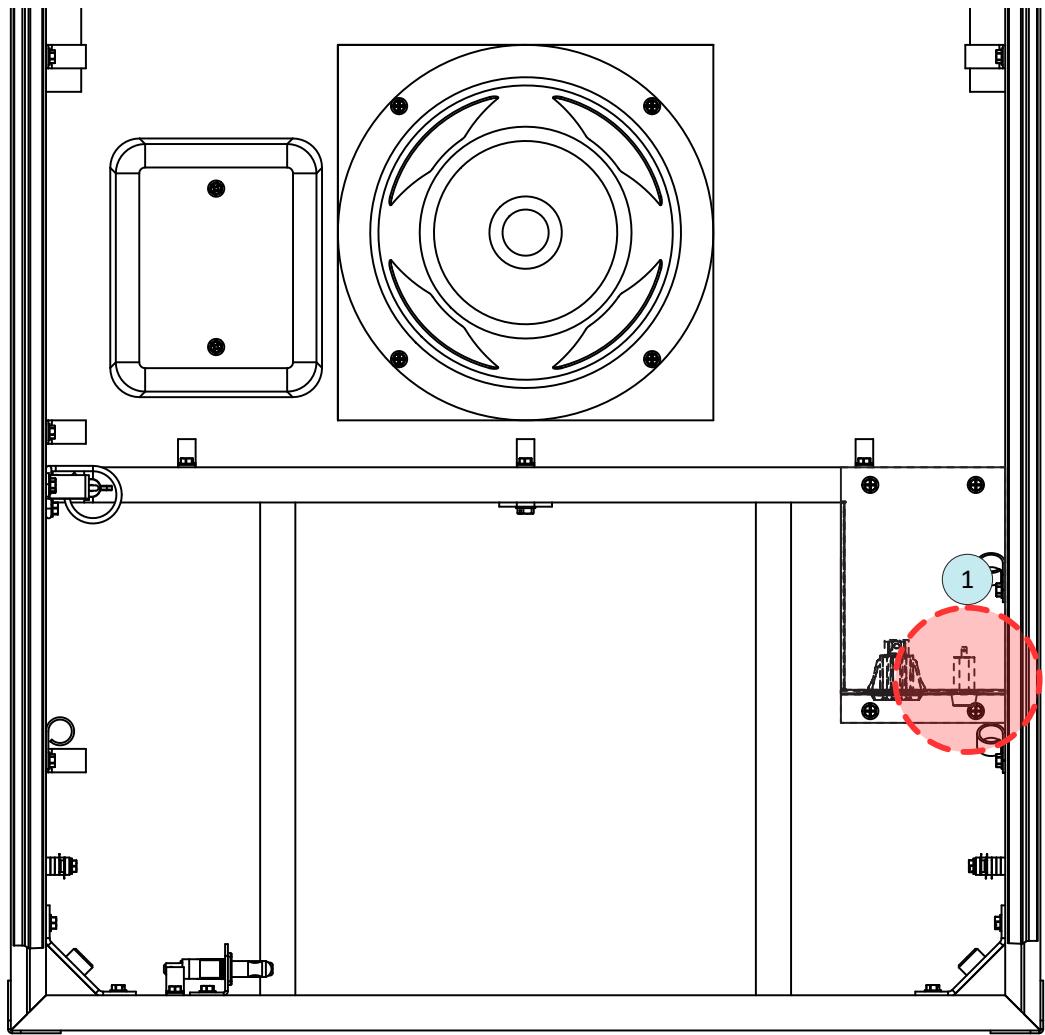
J3 DC Power Input

| | | |
|------|----------|----------------------------|
| J3-1 | BLK | Ground from ATX Pwr Supply |
| J3-2 | Not Used | |
| J3-3 | YEL | +12VDC from ATX Pwr Supply |
| J3-4 | BLK | Ground from ATX Pwr Supply |

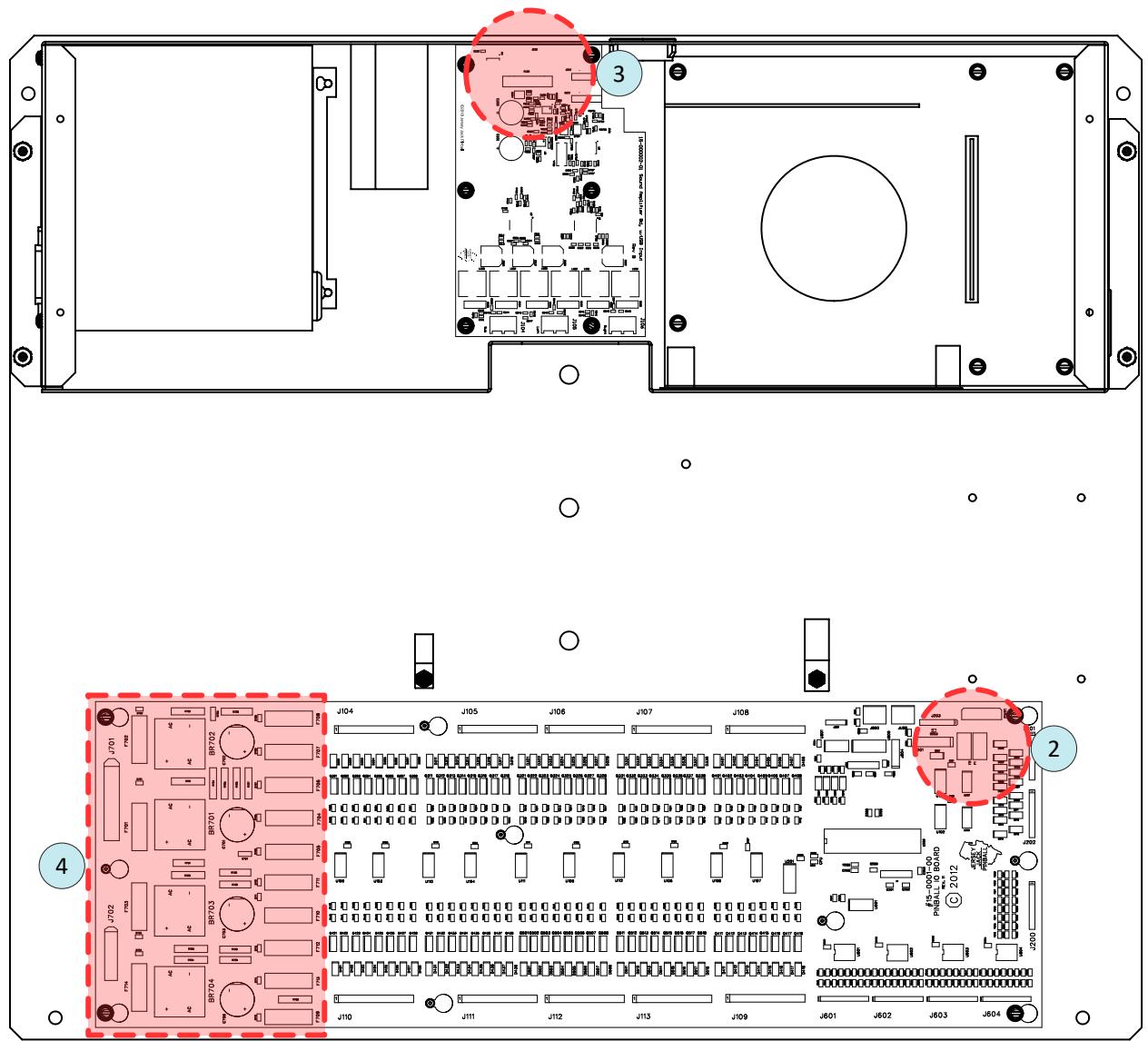
J4 Power Pass-Through

| | | |
|------|----------|---------------------|
| J4-1 | BLK | Ground to coin door |
| J4-2 | Not Used | |
| J4-3 | YEL | +12VDC to coin door |
| J4-4 | BLK | Ground to coin door |

Fuse Locations



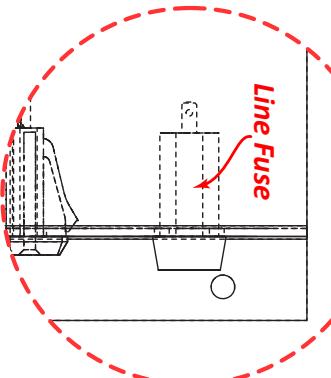
Bottom of Cabinet



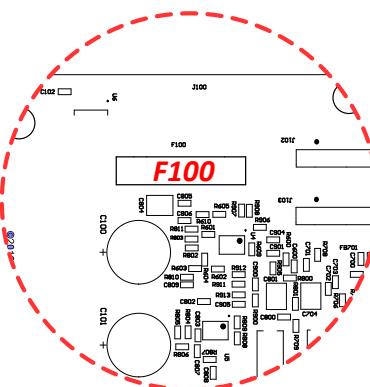
In Backbox

Fuse Information

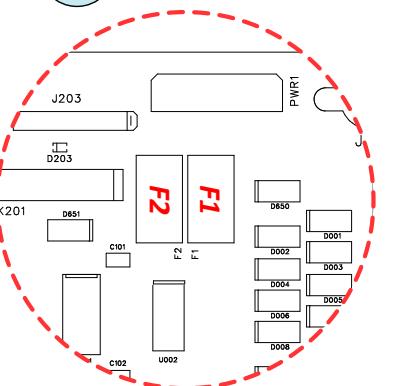
1 Power Box Assembly



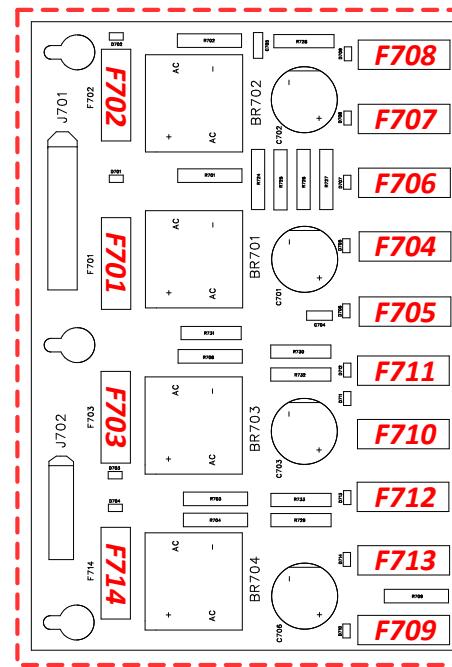
3 Sound Amplifier Board



2 I/O Board



4 I/O Board



Fuse Identifier(s)

F701, F702
F703, F706, F707
F705
F704, F708
F710, F711, F712, F714
F709
F713

Description

Fuse, Time Delay, 10A, 250V, 5mm x 20mm
Fuse, Time Delay, 6.3A, 250V, 5mm x 20mm
Fuse, Time Delay, 7A, 250V, 5mm x 20mm
Fuse, Time Delay, 5A, 250V, 5mm x 20mm
Fuse, Time Delay, 4A, 250V, 5mm x 20mm
Fuse, Time Delay, 3A, 250V, 5mm x 20mm
Fuse, Time Delay, 2A, 250V, 5mm x 20mm

Part Number

170-000110-SM
170-000163-SM
170-000107-SM
170-000105-SM
170-000104-SM
170-000103-SM
170-000102-SM

Fuse Identifier(s)

F1, F2
F100
125V Line Fuse
250V Line Fuse

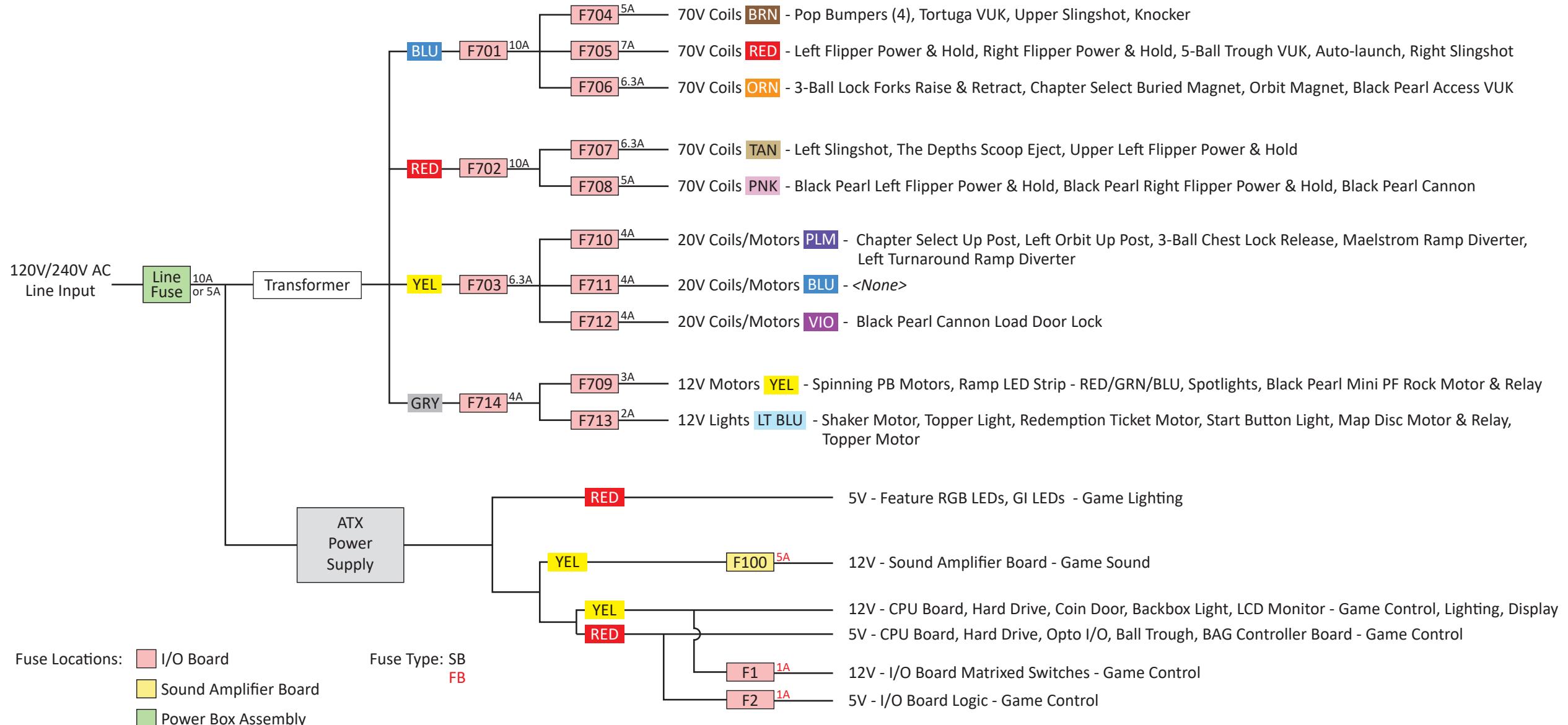
Description

Fuse, Fast-Acting, 1A, 32V, Mini Blade
Fuse, Fast-Acting, 5A, 250V, 5mm x 20mm
Fuse, Slow Blow, 10A, 125V, 0.25" x 1.25", 3AG
Fuse, Slow Blow, 5A, 250V, 0.25" x 1.25", 3AG

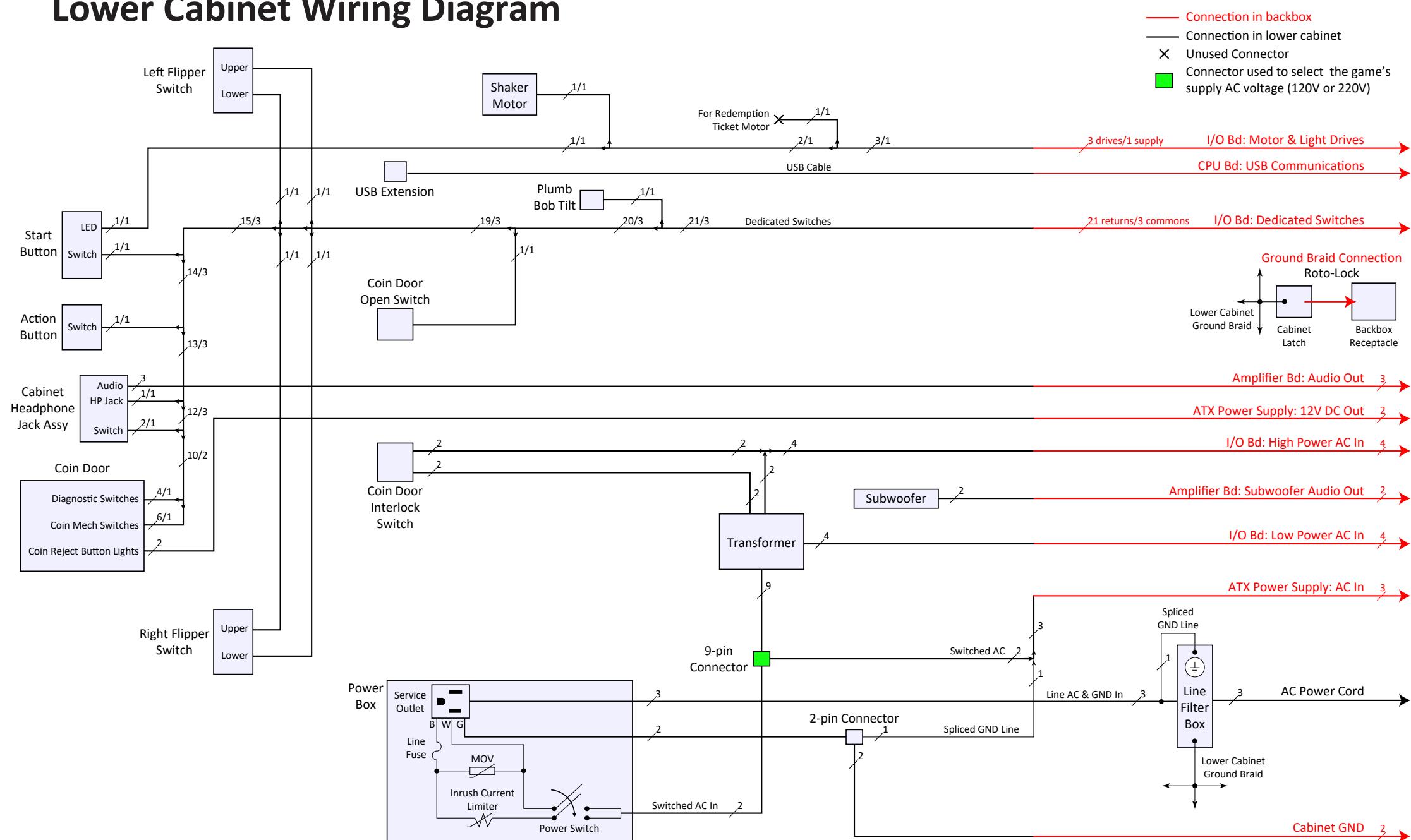
Part Number

170-003201-FB
170-000205-FM
170-000110-SR
170-000205-SR

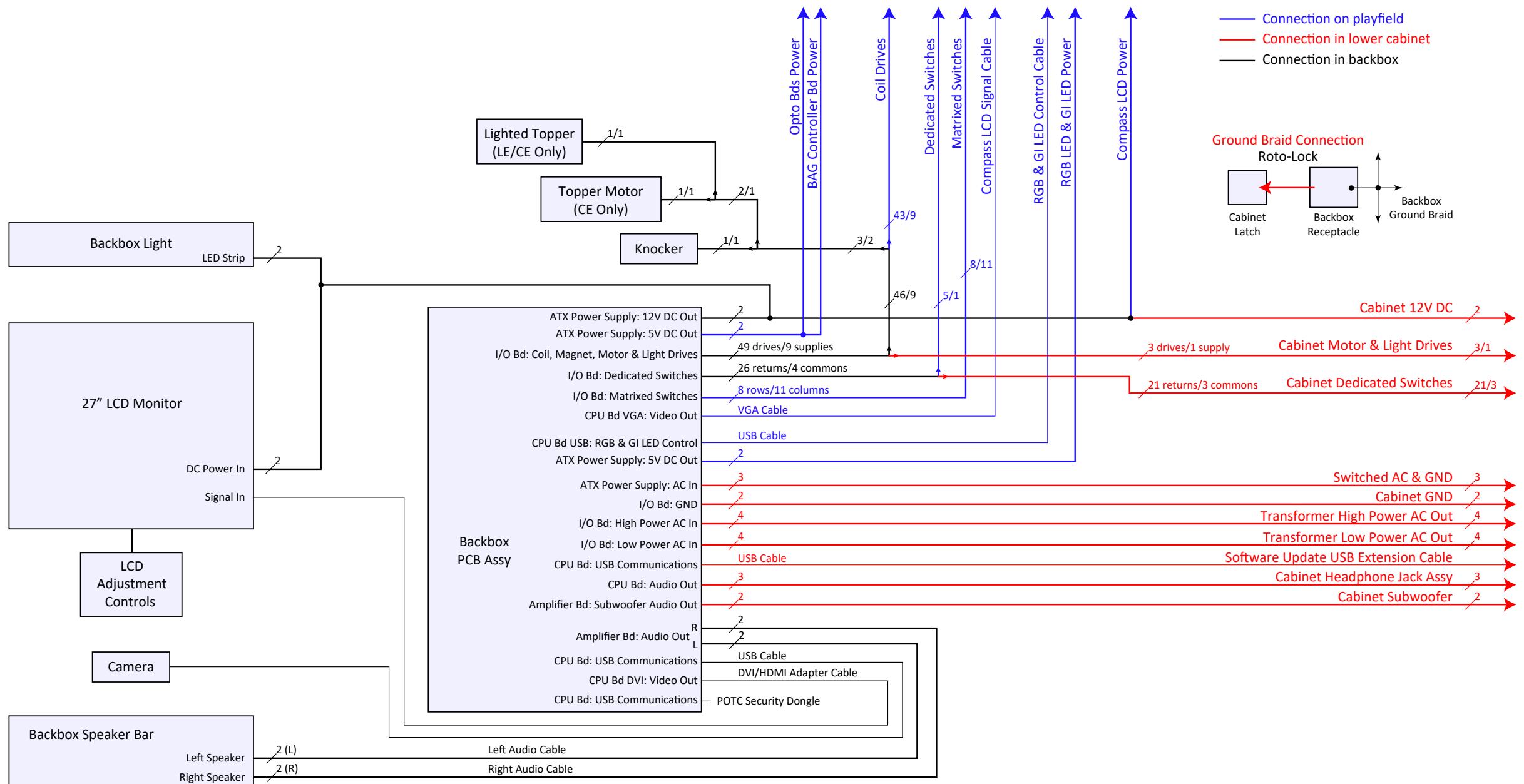
Fused Power Stream



Lower Cabinet Wiring Diagram

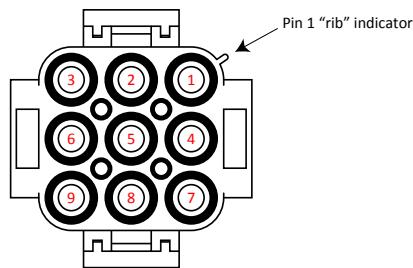


Backbox Wiring Diagram

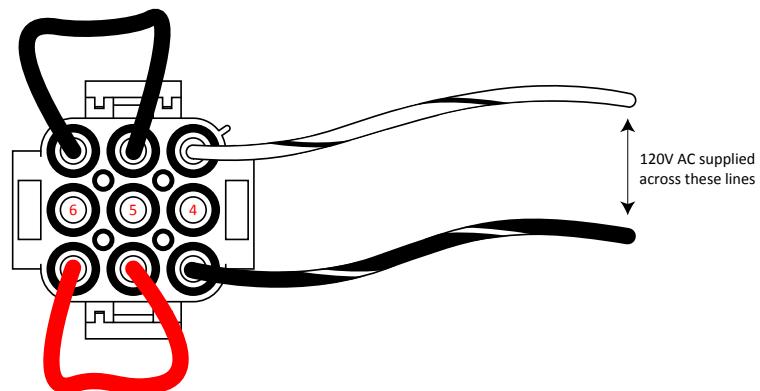


Supply Voltage Conversion

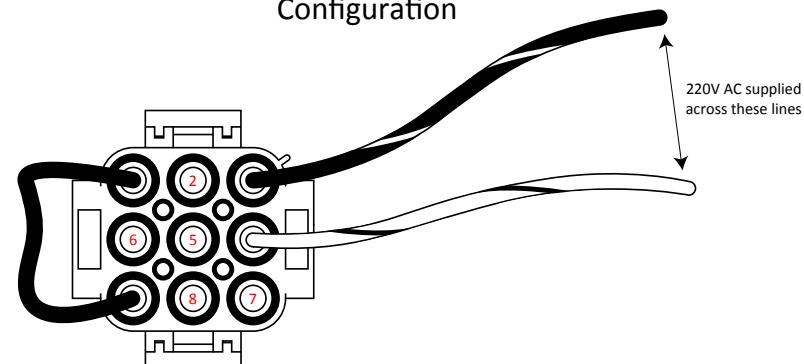
Voltage Conversion
Connector Pin-out



120V AC Input
Configuration



220V AC Input
Configuration



If you need to convert your game to a different supply voltage than it was wired for at the factory, locate the 9-pin connector at the input of the transformer, in the bottom of the lower cabinet (shown opposite and in the green box on page D-92).

Power the game down and disconnect the 9-pin connector (it has locking tabs on each side). Looking at the back of the jumpered connector (the end with the wires protruding), locate the pin 1 "rib" indicator and orient the connector so that it is in the upper right hand corner, as shown opposite. The red numbers show pin numbers for the entire connector.

Look at the illustration for the desired configuration and compare it to the current configuration. Using a 0.084" pin extractor, remove all pins that require repositioning by pushing them out of the back of the connector, from the front. You can reuse existing wires as long as they were not damaged during the removal process. Fashion new, short jumper wires, as needed.

Using the appropriate illustration for reference, insert the jumper pins all the way into the connector, in the proper positions, from the back side, until they lock in place.

For a 120V supply voltage, connect the AC inputs across pins 1 & 7. Next, jumper pins 2 & 3 together with a short piece of black wire. Lastly, jumper pins 8 & 9 together with a short piece of orange wire.

For a 220V supply voltage, connect the AC inputs across pins 1 & 4. Then jumper pins 3 & 9 together with a short piece of black wire.

Note: Your POTC game makes use of a switching, modular power supply for the RGB LED & GI lighting systems (5V), the sound amplifier board (12V), the CPU board (5V & 12V) and/or other game functions. This switching power supply has a voltage selection slide switch on its exterior panel that must be in the proper position (120V or 220V) before applying power to the game.



Section E

Game Service & Troubleshooting



E.1 Cabinet Sound Controls

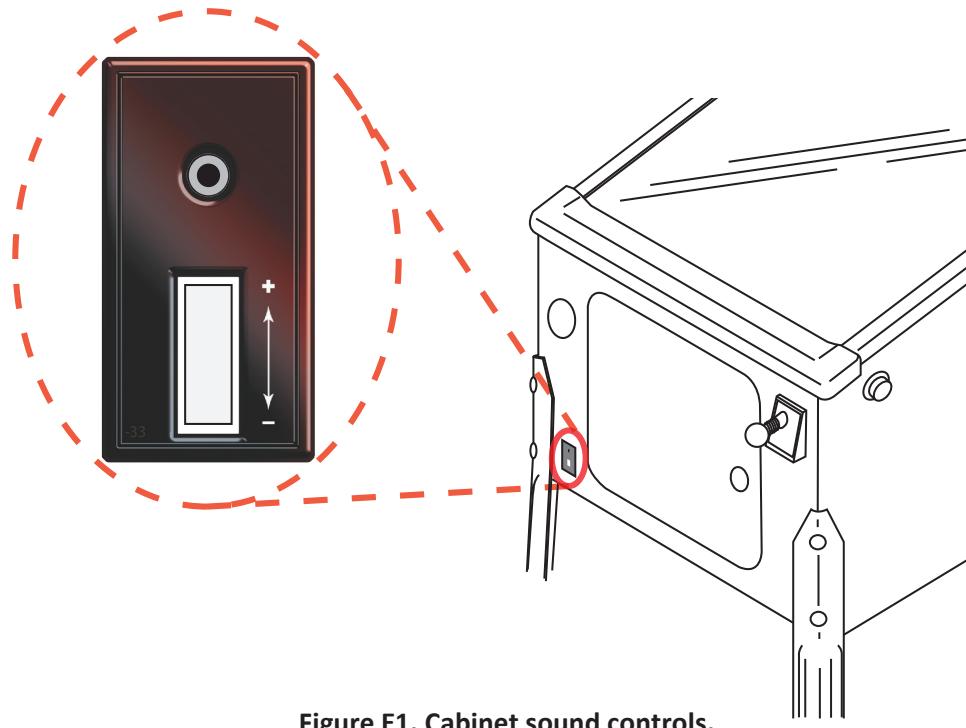


Figure E1. Cabinet sound controls.

The POTC sound system features a stereo headphone jack on the front of the cabinet, along with a volume control (circled in figure E1). To adjust the headphone levels, use the volume up/down rocker switch.

The cabinet rocker switch may also be used to adjust the overall volume of the game (through its speakers), provided the appropriate setting is enabled in the System Settings menu (see **System Settings** in Section B of this manual).

WARNING:

Jersey Jack Pinball® encourages you to use the provided headphone jack responsibly. Different ear buds or headphones may produce different sound levels. **ALWAYS** begin with a low output level when connecting headphones and gradually increase the volume to a comfortable level. Pay close attention to and set strict limits for how long you expose your ears to high volume levels through headphones. **DO NOT** turn up the headphone volume on your POTC game in an attempt to block out noisy surroundings. Prolonged exposure to high volume levels can cause irreversible damage to your hearing! If you experience ringing in your ears or have difficulty understanding speech, stop listening and have your hearing tested immediately.

E.2 Performing a Full Software Update



Figure E2. Icons for USB stick.

Preparations: Visit <https://www.jerseyjackpinball.com/support/> and download the latest full POTC software update (.ISO file). If you have not already done so, download the UNETBOOTIN utility for Windows or Macintosh.

Tools Required:

Personal computer
8 GB (min) USB memory stick

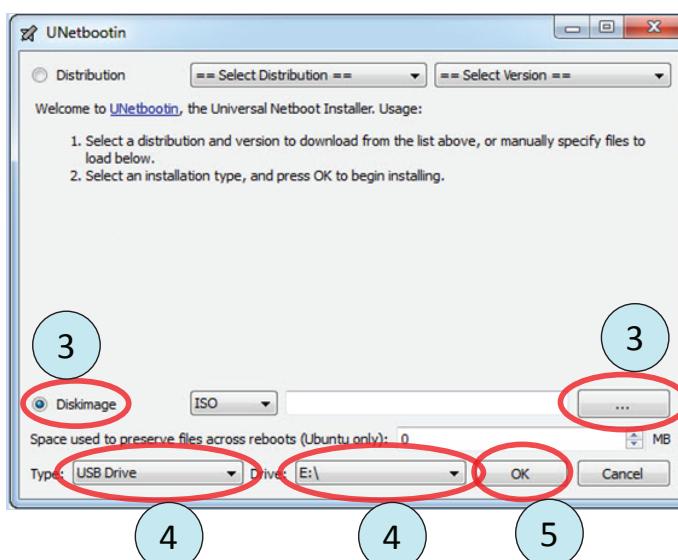


Figure E3. Initial UNETBOOTIN application window.

The full software update is also referred to as a factory reinstallation of game software. At times, a full software update will be the only method for updating your game, as critical, underlying operating system changes are often required.

- 1) Insert an 8 GB USB memory stick into an empty USB slot in your personal computer. **WARNING: All data on the USB stick will be erased during this process!** You should see a new **Removable Disk** under **My Computer** (Windows) or a new **Drive** on your **Desktop** (Macintosh), as shown in figure E2.
- 2) Run the UNETBOOTIN application. The UNETBOOTIN window (shown in figure E3) will open.
- 3) Select the **Disk Image** option, then click the '...' button (both are circled in figure E3). Locate and select the POTC ISO file you downloaded from the Jersey Jack Pinball® website.
- 4) Ensure that the **USB Drive** is selected under **Type** and the USB stick you inserted earlier ("E:\\" in this example) is selected under **Drive** (both are circled in figure E3).
- 5) Click the **OK** button to begin the copy/burn process, which will take approximately 10-20 minutes to complete (depending upon the speed of your computer). Again, all data on the USB stick will be erased during this process.

6) Throughout the ISO image copy/burn process, the window in figure E4 will be displayed and updated.

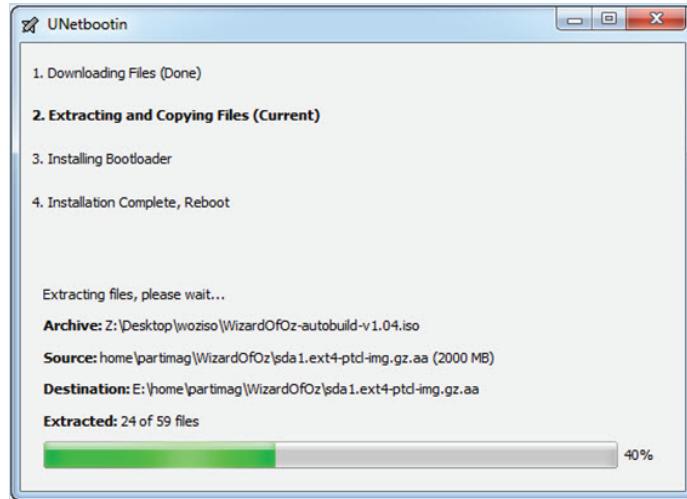


Figure E4. UNETBOOTIN copy/burn progress window.

7) When the copy/burn process is complete, the window in figure E5 will be displayed. **WARNING: DO NOT CLICK THE 'Reboot Now' BUTTON!** Click the **Exit** button or the red X in the upper corner of the window.

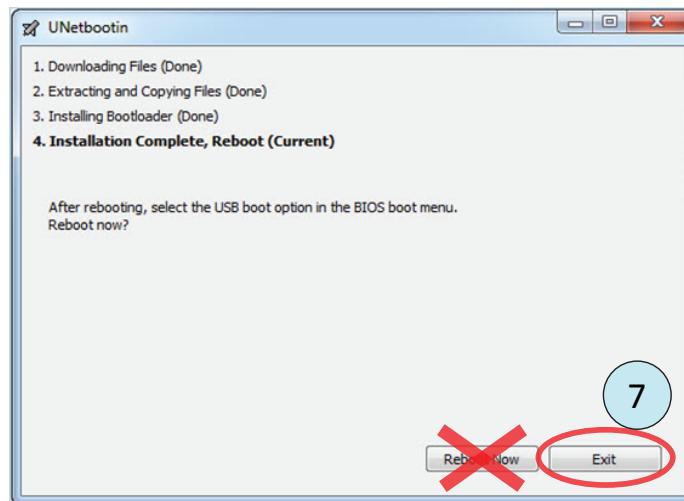


Figure E5. UNETBOOTIN installation complete window.

8) Remove the USB stick from your personal computer. Power your game down and insert the USB stick you burned into the USB cable attached to the cabinet divider, behind the coin box, just inside your game's coin door.

9) Power up your game with the USB stick inserted. The game will auto-update with no user input; do not power the game down during the update process (which will take less than 5 minutes).

10) When the update is complete, the screen in figure E6 will be displayed on the game's LCD monitor. Power the game down, remove the update USB stick and power it on again. Your game will boot up running the new version of software (which can be verified by entering the POTC menu system - see Section B). Store your 8 GB USB stick in a safe place; it can be used to perform another full software update in the future (to this same software version or a newer one).

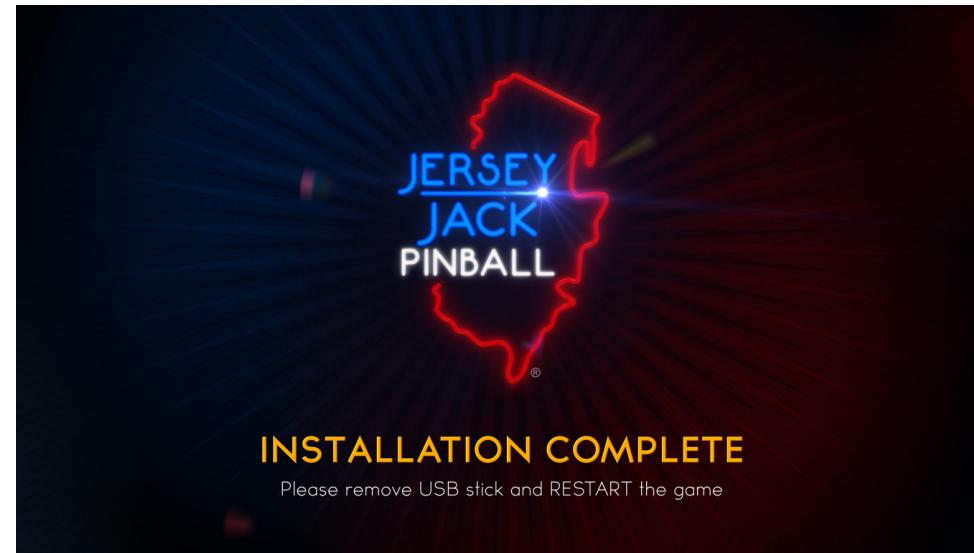


Figure E6. Update installation complete!

E.3 Replacing Your Game's CPU Battery

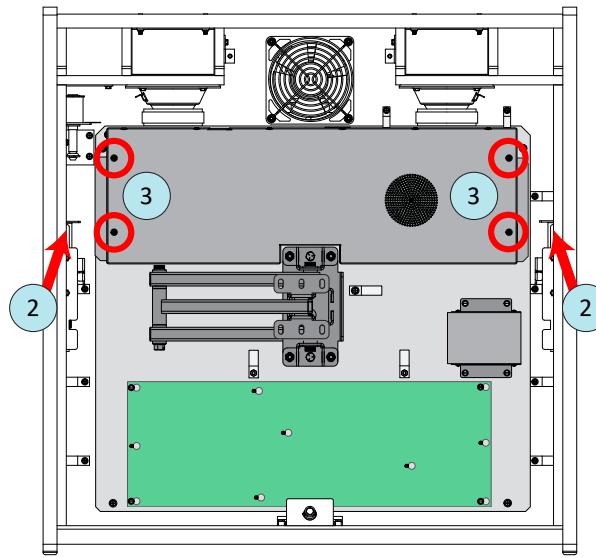


Figure E7. Removing PCB chassis lid.

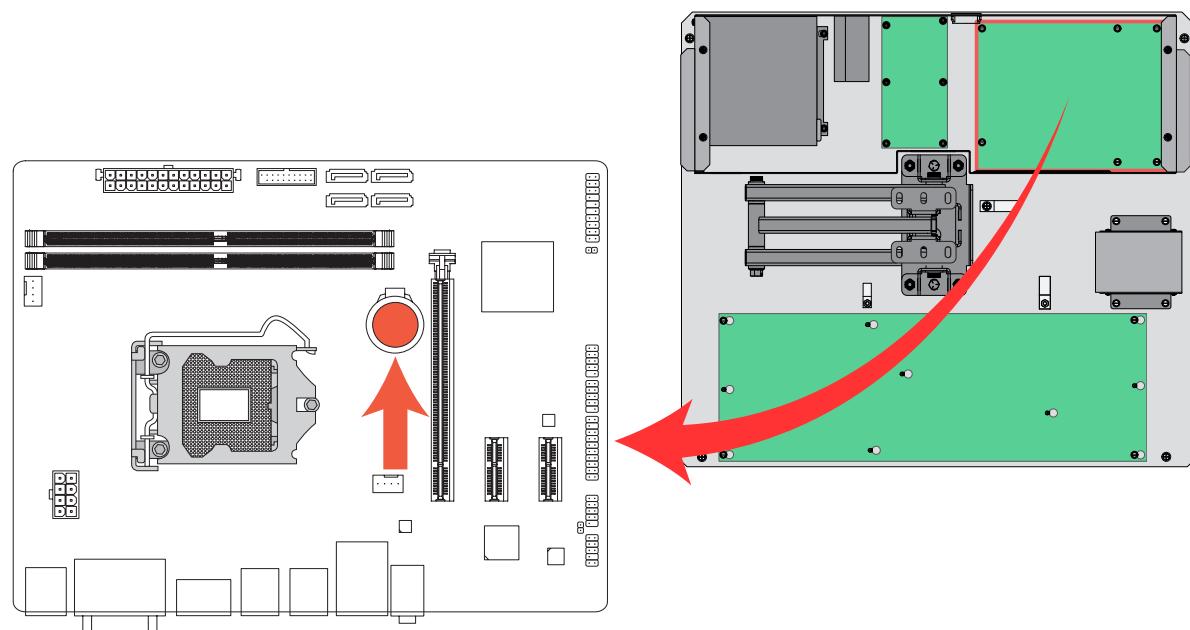


Figure E8. CPU board and battery locations.

Your game's CPU board uses a 3V coin cell, lithium battery (CR2032) to maintain its basic input/output system (BIOS) settings when the game is powered down. If these settings are lost, the CPU will not boot when the game is powered up. The life expectancy of the CR2032 battery is approximately three years. It is important to change your game's CPU battery before it discharges below 3V. However, in order to preserve the CPU's BIOS settings, the change must be made while the game is powered on. A step-by-step process for replacing the battery is provided below.

- 1) With the game off, open the coin door and locate the keys to the backbox lock (hanging on a hook, alongside one of the coin mechanisms). Unlock the backbox lock (item 2 on pg C-45), slide the backglass upward and remove it, bottom edge first. Carefully set it aside.
- 2) Release the 27" LCD monitor, by lifting the two latches, top left & right (red arrows, figure E7), while carefully pulling the screen straight out of the backbox. Extend the screen outward, then swing it over to either side of the backbox.
- 3) Disconnect the Backbox LED Strip cable (left, inside of the backbox) and free the loose end from the nylon cable clamp(s). Remove the lid of the Backbox PCBs EMI Shield Enclosure by removing the four HWH Phillips machine screws (circled in red, figure E8); set the lid and the four screws aside.
- 4) Locate the CPU board (upper right corner of the EMI shield enclosure), then the shiny, CR2032 coin cell battery & holder mounted on its surface (red arrow and circle, figure E8). Note the orientation of the battery in its holder (with the battery label/imprint facing *outward*).
- 5) Power the game on and wait for it to complete its boot cycle. Cut a 3-inch long piece of masking tape and fold it 1 inch from the end. This should form a 1-inch long "handle" and leave a 1-inch long adhesive end.
- 6) Briefly touch the lockdown bar on the game to dissipate any static charge in your body **before** touching the CPU board.
- 7) Carefully affix the adhesive portion of the tape onto the top of the CR2032 battery, applying moderate pressure. **WARNING:** Do *not* flex the CPU circuit board! Rub the surface of the tape, back and forth, to ensure that it attaches well to the battery - **not** the holder.

- 8)** Holding onto the tape “handle” with one hand, free the battery from its holder clip with the other. Ensure that the battery does not touch anything on the surface of the CPU board as you pull it out of its holder and away from the PCB Chassis.
- 9)** Pull the tape “handle” off of the old battery and apply it to the top of a new CR2032 battery.
- 10)** Again, momentarily touch the lockdown bar on the game.
- 11)** Holding the new battery’s tape “handle”, carefully insert it into the battery holder, in the same orientation as the old one (battery label/imprint facing *outward*). Ensure that the battery snaps into its holder properly.
- 12)** Carefully remove the tape “handle” from the top of the new battery, ensuring that you do not pull the battery out of its holder in the process.
- 13)** Power the game down.
- 14)** Replace the Backbox PCBs EMI Shield Enclosure lid and re-install the four HWH Phillips machine screws. **CAUTION:** Be careful not to pinch any wires in between the lid and the EMI shield enclosure!
- 15)** Pivot and swing the 27" LCD back into the backbox. Align it with the left and right side latches. Carefully push one side of the monitor in at a time, lifting the appropriate latch as you do so. Ensure the monitor is all the way inside the backbox, on **BOTH** sides, held firmly in place by the two latches.
- 16)** Re-install the game's backglass. Re-lock the backbox lock and put the key back on the hook, alongside one of the coin mechanisms, inside the coin door. Close the coin door.

Note: If your game’s CPU battery discharges below 3V (or if you remove the battery) while the game is turned off, all BIOS settings will return to factory defaults. As a result, your game will not boot properly the next time you attempt to power it up. In this case, contact JJP® technical support for assistance in restoring your CPU BIOS settings and getting your game to successfully boot again.

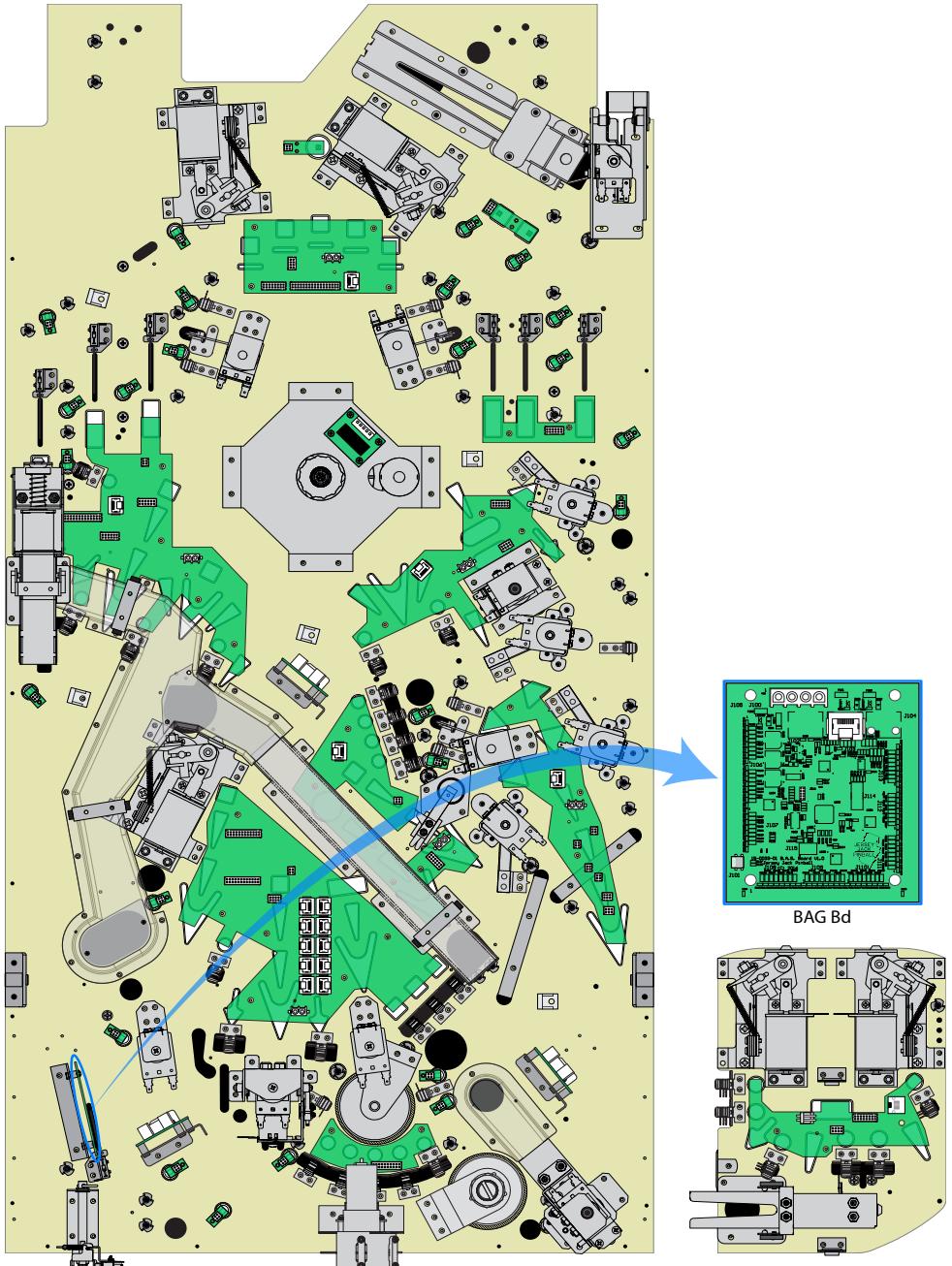


Figure E9. POTC lighting system controller boards.

E.4 The POTC Lighting System Theory of Operation

The POTC lighting system can be divided into three major subcomponents: communications/control, general illumination (GI) and feature lighting. One of the primary attributes of the system is parallel control of all lighting in the game; issues with individual (or a small group of) LEDs will not affect large areas of the playfield. Modularity and flexibility are also important system characteristics.

The communications/control hub is the Bus, Accelerometer and GI (BAG) board; it is mounted, vertically, under the upper left area of the playfield (circled in blue in figure E9). An on-board microcontroller receives data/commands over a USB connection to the CPU board (**J101**). Controls are then sent out, over an inter-integrated circuit (I2C) bus, to the game's light boards - and more, if needed. Communicating over an I2C bus, between printed circuit boards (**J102**, **J103**), adds a great deal of flexibility to the system. Simultaneous control of a wide variety of device types is now possible.

GI and feature lighting are independent circuits in POTC. However, all circuits are GI functions (lighting under playfield plastics, primarily) are accomplished with either single color (cool white) LED boards (in Std games) or RGB LED boards (in LE & CE games), whereas RGB LED boards are always used for feature lighting (lighting behind playfield inserts, primarily). All GI and feature lighting power is 5VDC, run through the nine main RGB LED boards, under the playfields. This 5VDC is supplied by the ATX Power Supply, located inside the backbox PCBs EMI shield (item 6, pg C-48 of this manual).

Communication/control signals are distributed, through CAT5 ethernet cables, between the BAG board (**J103**), the nine main RGB LED PCBs (**J101**, **J201**, **J301**, **J501**, **J601**, **J801**, **J901-J908**, **J109** & **J110**) and the Back Panel Starfield PCB (**J101**, LE & CE games only). Signals from the BAG board are supplied to the ninth main RGB LED PCB, then out (in parallel) to all of the remaining main RGB LED PCBs (and the Back Panel Starfield PCB). Several of the main RGB LED PCBs, in turn, control groups of individual, "satellite" RGB or white LEDs around the playfield. An unplugged or damaged ethernet cable will interrupt control to any main RGB LED PCBs, RGB LEDs and/or white LEDs downstream.

White GI (Std games): A pair of wires runs to each GI LED board. One wire (solid GRY) supplies power to the LED, the other (GRY with a stripe) is the control/return line from the LED; this line is used to vary the LED's intensity. The pairs of wires are bundled together into cable assemblies (pg C-101). The striped wires are color coded to quickly identify which pins each LED connects to at its main RGB LED PCB connector. The first LED in each cable has a drive wire with a BLK stripe, the second has a BRN-striped wire, the third, a RED-striped wire and so on, through the resistor color code (BLK, BRN, RED, ORN, YEL, GRN, BLU, VIO). Color code references for GI wiring are included in GI wiring PF diagrams & tables (pgs C-96 to C-101) and main RGB LED board schematics & connector pin-out listings (pgs D-12 to D-42).

RGB GI (LE & CE games) and Feature Lighting: RGB LEDs are essentially 3 LEDs in one package: one red, one green and one blue. As such, four wires are run to each RGB LED in the game. One wire supplies power to the LED package, the other three are individual intensity control/return lines - one for each LED color: **red, green, blue.** The quartets of wires are bundled together into cable assemblies (pgs C-95 & C-101). The wires are color coded to quickly identify which pins each RGB LED connects to at its main RGB LED PCB connector. A base color is used for each set of four wires. The power wire for each quartet is the base color, solid (no stripe); the control/return wire for each LED color is the base wire color with a stripe in that color. For example, if the base color is YEL, the power wire will be solid YEL. The wires controlling red, green and blue intensities will be YEL with a RED stripe, YEL with a GRN stripe and YEL with a BLU stripe, respectively. If the stripe color would match the wire's base color, a GRY stripe is used for that control wire instead.

The first RGB LED in each cable has a wire base color of BLK, the second has a base color of BRN, the third, a base color of RED and so on, through the resistor color code (BLK, BRN, RED, ORN, YEL, GRN, BLU, VIO). Color code references for RGB GI and feature lighting wiring are included in GI wiring PF diagrams & tables (pgs C-96 to C-101), feature lighting PF diagrams & tables (pgs C-86 to C-95) and main RGB LED board schematics & connector pin-out listings (pgs D-12 to D-42).

To set the radiant color for an RGB LED, we manipulate the intensity of each LED component, **red, green, blue.** For example, equal intensities of red and blue (along with no intensity of green) will result in a particular intensity of violet. Equal intensities of all three colors will create a certain intensity of cool white. If the LEDs are run at maximum intensity, they will produce very bright lighting effects - but both the driver IC and the LED itself will be working quite strenuously. In this case, the driver/LED combination will draw a lot of current and create a lot of heat (both undesirable). If the LEDs are run at a low intensity, they'll produce very dim lighting effects, but the result will be much less taxing on the driver IC and RGB LED package. We try to run the RGB LEDs somewhere just above the middle of their operating range in most situations. However, the overall feature lighting brightness in the game can be adjusted in the System Settings menu (see pg B-23 of this manual).

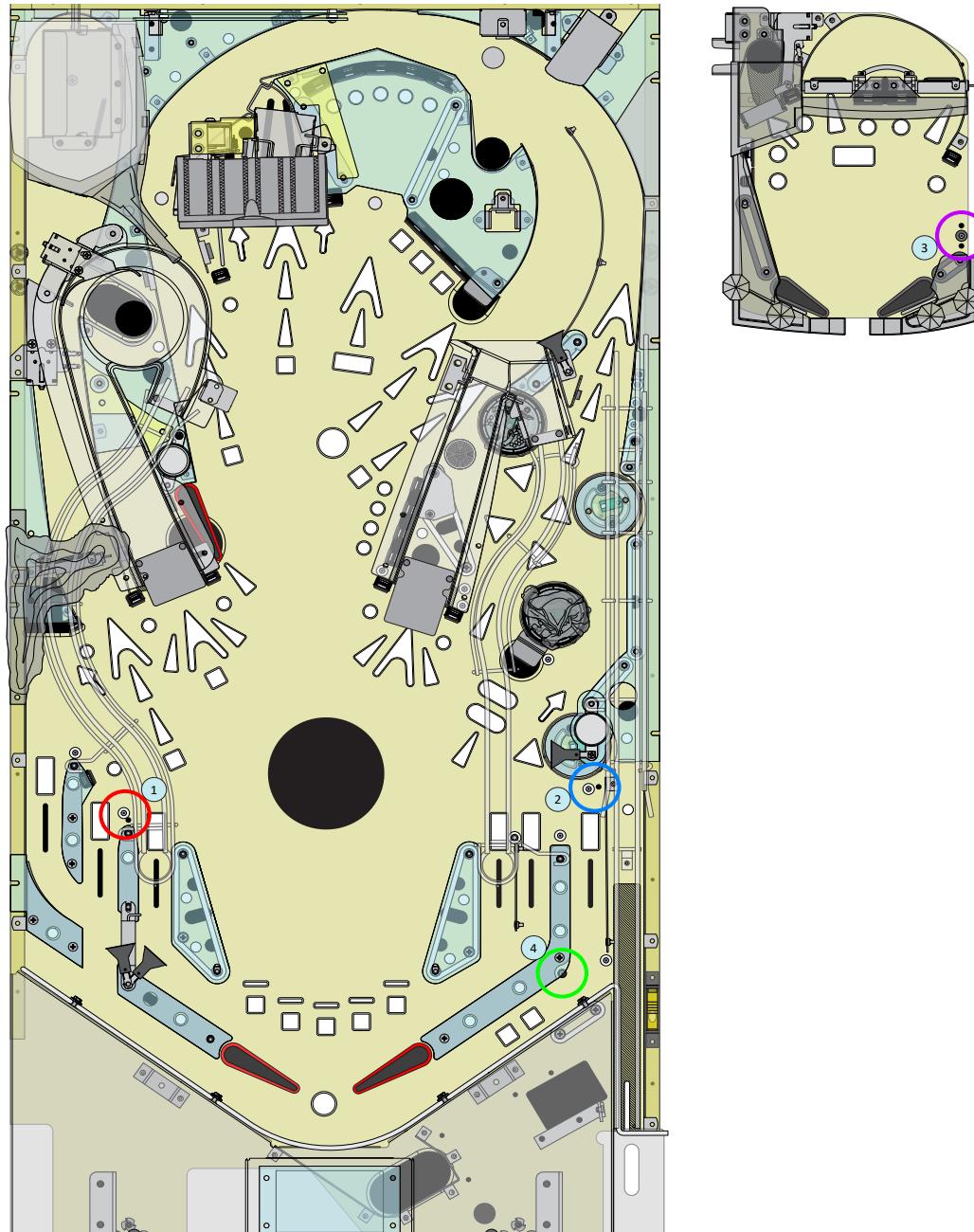


Figure E10. POTC playfield adjustable posts.

E.5 POTC Playfield Post Adjustments

Preparations: Ensure that all 5 pinballs are in the trough or completely removed from the game (not in the shooter lane, Treasure Chest lock, subway or any eject hole). Power down the game and remove the playfield glass. Pull the playfield up and out of the cabinet, to position 2 (shown on pg A-8 of this manual).

Tools Required:

Ratchet
1/4", deep socket
3/8" open end wrench

You can make a few post adjustments on the POTC playfields to make your game play either more liberally or more conservatively.

1) The steel mini post near the left outlane (circled in red in figure E10) can be repositioned (or removed altogether) to make the game play more or less liberally/conservatively. There are two pre-drilled mounting holes in the playfield. The most liberal post position is the highest (furthest from the player) of the two holes (making it more difficult for the ball to get to the left outlane). When the post is moved closer to the inlane/outlane divider, the game will play more conservatively (making it easier for the ball to get to the left outlane). The most conservative adjustment is to remove the post altogether. See the mini post removal or installation instructions below. No plugs are necessary for the unused hole(s) in the playfield.

2) The steel mini post near the right outlane (circled in blue in figure E10) can be repositioned (or removed altogether) to make the game play more or less liberally/conservatively. There are two pre-drilled mounting holes in the playfield. The most liberal post position is the leftmost (closest to the player) of the two holes (making it more difficult for the ball to get to the right outlane). When the post is moved closer to the inside shooter lane flatrail, the game will play more conservatively (making it easier for the ball to get to the right outlane). The most conservative adjustment is to remove the post altogether. See the mini post removal or installation instructions below. No plugs are necessary for the unused hole(s) in the playfield.

3) The steel mini post near the right side of the Black Pearl mini PF (circled in violet in figure E10) can be repositioned (or removed altogether) to make the game play more or less liberally/conservatively. There are three pre-drilled mounting holes in the mini playfield. The most liberal post position is the highest (furthest from the player) of the three holes (making it more difficult for the ball to fall off of the mini PF). When the post is moved closer to the right side sculpture, the game will play more conservatively (making it easier for the ball to fall off of the mini PF). The most conservative adjustment is to remove the post altogether. See the mini post removal or installation instructions below. No plugs are necessary for the unused hole(s) in the playfield.

4) The steel mini post near the opening in the inside shooter lane flatrail (circled in green in figure E10) has no post rubber attached to it, as shipped from the JJP® factory. This is the conservative configuration for this post (making it more difficult for the player to nudge a ball going down the right outlane back into the shooter lane). A post rubber is included in your cashbox that can be attached to this mini post to make your game play more liberally (making it easier for the player to nudge a ball going down the right outlane back into the shooter lane). To attach the post rubber, carefully lift the back corner of the playfield plastic covering the right flipper return lane plate and slide the post rubber down over the top of the post. Push the rubber down until it sits in the slight groove in the post.

To remove a steel mini post: The first step is to firmly grasp the rubber ring and pull it straight up, off of the post. Locate the washer and nylon stop nut for the post under the playfield. Using the ratchet and 1/4", deep socket from above and the 3/8" open end wrench from below, remove the nylon stop nut and washer from the bottom of the post. Apply firm pressure to the bottom of the post while slowly continuing to back the post out of the playfield with the ratchet. **WARNING: DO NOT** simply pull the post out; you can damage your playfield surface! Note: You may have to remove an RGB LED board in order to gain access to the playfield hole and/or stop nut.

To install a steel mini post: Carefully align the threads of the post with the hole and begin "threading" it, by hand, into the hole (slowly turning it in a CW direction). When it becomes difficult to turn the post by hand, use the ratchet and 1/4", deep socket to continue "threading" it into the playfield. When the threads of the post sufficiently protrude from the bottom of the playfield, install the #10 washer and 10-32 nylon stop nut. Using the ratchet and socket from above and the 3/8" open end wrench from below, carefully tighten the nylon stop nut until the post is pulled all the way down to playfield surface level and firmly held in place. You should not be able to move the post at all by hand when you are done. **DO NOT OVERTIGHTEN!** Lastly, install the post rubber ring, by sliding it over the top of the mini post. Note: You may have to remove an RGB LED board in order to gain access to the playfield hole and/or stop nut.



Appendices



25¢ Standard USA Coin Door Assembly, 12V, No Headphone

JJP® PN 40-000006-20

| ITEM NO. | QTY. | PART NO. | DESCRIPTION |
|----------|------|---------------|--|
| 1 | 2 | 42-0231-00D | ENTRY BEZEL, IL, PLASTIC |
| 2 | 2 | 42-0517-05D | REJECT BUTTON ASSY. YELLOW W/HAPP .25 INSERT |
| 3 | 2 | 42-3371-00 | PLASTIC MECH HOLDER W/2 METAL CLIPS & SW NO LAMP |
| 4 | 2 | 42-0232-00D | RETURN BEZEL, IL, PLASTIC |
| 5 | 2 | 42-1247-20 | NEW COIN ENTRY RESTRICTOR WITH 2 TEETH |
| 6 | 2 | 42-0119-00D | RETURN DOOR FLAP, PLASTIC |
| 7 | 1 | 42-0641-00 | LOCK ASSY 7/8 W/1-1/8"W/1/8" OFFSET DOUBLE BITTED KD |
| 8 | 2 | 43-0022-00 | SCREW, 4-40 X .25 PH. PN. HD |
| 9 | 12 | 48-1000-00 | SCREW, F/BEZEL, LONG 6 X 12 HEX WASHER HD HI-LOW RO |
| 10 | 4 | 43-1003-00 | SCREW,SPL F/PLAST, #4 X .42/.39 SPL HI THD,B TIP PH HEX W HD |
| 11 | 1 | 42-0254-02 | LOCKWASHER, F/LOCK 3/4" INTERNAL |
| 12 | 1 | 42-0612-20 | PINBALL COIN DOOR, 2 ENTRY, BRKT, UPSTACKER MEI VAL |
| 13 | 1 | 891-1701-016 | FRAME STD DRII S2000 NOTCH BLK |
| 14 | 4 | 92000A215 | SCREW, PAN HD, M4 X 5MM LG |
| 15 | 1 | 891-0100-4016 | BLANKING PLATE DBV (BLACK) LARGE OPENING |
| 16 | 4 | 42-0082-00 | NUT, KEPS 8-32 |
| 17 | 4 | 890-1051-00 | SPACER .20 X.375 DIA X .500 L RICHCO SS10-4 |
| 18 | 1 | 03-7655-6 | CABLE CLAMP, 3/8" DIA. |
| 19 | 1 | 43-0127-00 | TIE PLATE |
| 20 | 1 | 95-0278-00 | DANGER LABEL FOR COIN DOORS ELECTRIC SHOCK |
| 21 | 1 | RBM-798 | BRKT ASSY 4 BUTTONS FOR PINBALL DOOR |
| 22 | 2 | 42-0351-00D | LAMP HOLDER |
| 23 | 2 | 42-3079-100 | COIN MECH HAPP "PRO MECH" .25 CENT USA |
| 24 | 2 | 91-10WB-121W | LED T3 1/4 WEDGE BASE 12V SINGLE LED WHITE |

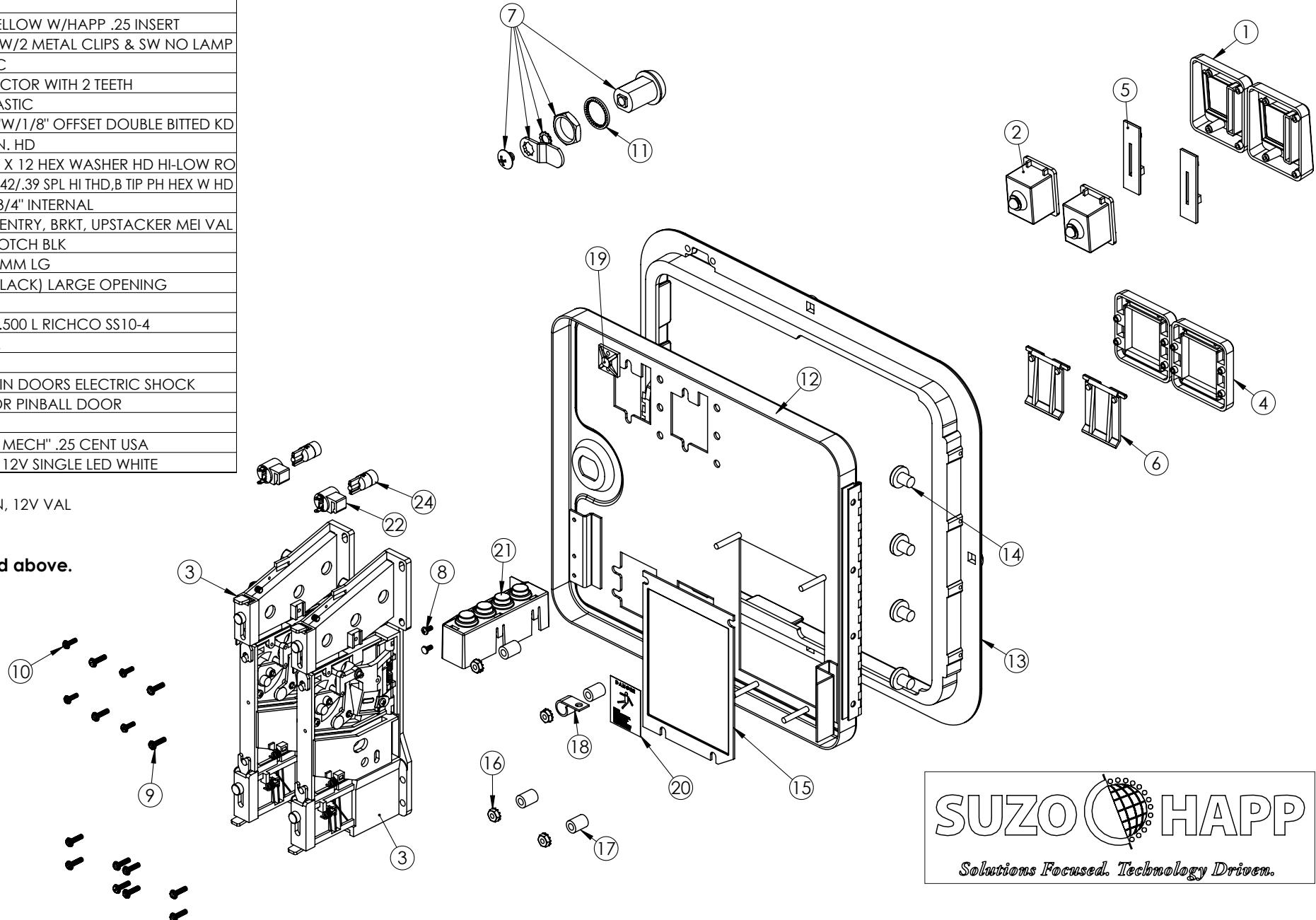
ITEMS NOT SHOWN:

96-1779-00 HARNESS, PINBALL DOOR, 2 SLOT COIN, 12V VAL

90-1013-00 (TIE WRAP), QTY 3

S-11136 CABLE TIE QTY 1

Note: Suzo-Happ parts and numbers are listed above.



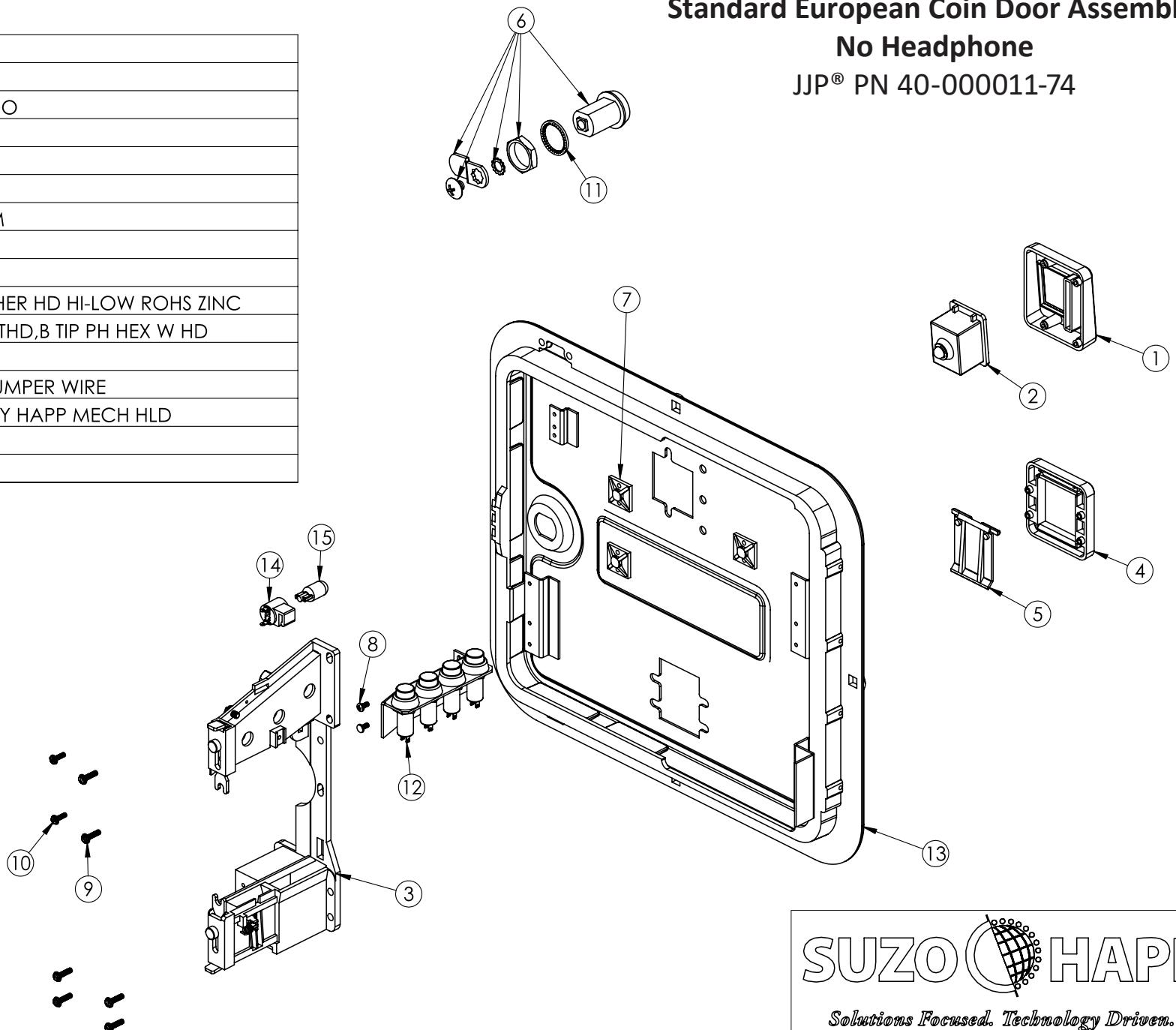
SUZO HAPP
Solutions Focused. Technology Driven.

| ITEM NO. | QTY. | PART NO. | DESCRIPTION |
|----------|------|-------------|--|
| 1 | 1 | 42-0231-00D | ENTRY BEZEL, IL, PLASTIC |
| 2 | 1 | 42-0930-00 | REJECT BT ASSY YL W/UNIV FINGER LOGO |
| 3 | 1 | 42-7355-00D | MECH HOLDER |
| 4 | 1 | 42-0232-00D | RETURN BEZEL, IL, PLASTIC |
| 5 | 1 | 42-0119-00D | RETURN DOOR FLAP, PLASTIC |
| 6 | 1 | 42-0641-00 | LOCK ASSY 7/8 W/1 1/8" STRAIGHT CAM |
| 7 | 3 | 43-0127-00 | TIE PLATE |
| 8 | 2 | 43-0022-00 | SCREW, 4-40 X .25 PH. PN. HD |
| 9 | 6 | 48-1000-00 | SCREW, F/BEZEL, LONG 6 X 12 HEX WASHER HD HI-LOW ROHS ZINC |
| 10 | 2 | 43-1003-00 | SCREW, SPL F/PLAST, #4 X .42/.39 SPL HI THD, B TIP PH HEX W HD |
| 11 | 1 | 42-0254-02 | LOCKWASHER, F/LOCK 3/4" INTERNAL |
| 12 | 1 | 96-0436-04 | HARNESS ASSY W/DIODE, 4 BUTTONS, JUMPER WIRE |
| 13 | 1 | 42-1072-00 | WELLS DR & FRAME ASY PINBALL 1 ENTRY HAPP MECH HLD |
| 14 | 1 | 42-0351-00D | LAMP HOLDER |
| 15 | 1 | 91-1319-00 | LAMP #555 6.3V |

ITEMS NOT SHOWN:

90-1013-00 - TIE WRAP - 3,
S-11136 CABLE TIE 5" LENGTH .14WIDTH 40LB NATURAL

Note: Suzo-Happ parts and numbers are listed above.



Standard European Coin Door Assembly,
No Headphone
JJP® PN 40-000011-74

Acronyms & Abbreviations

| | | | | | | | |
|-------|---|--------|---|------------|-----------------------------|----------------------|--------------------------------|
| A | Ampere | FH | Flat Head | N/A | Not Applicable | SOIC- | Small-Outline Integrated |
| AC | Alternating Current | F-M | Female - Male | nF | Nanofarad | Circuit (IC Package) | |
| Adj | Adjustable | Fm+ | Fast-mode Plus | nm | Nanometer | SPDT | Single Pole, Double Throw |
| Assy | Assembly | ft | Feet | NPN | Transistor Type | SPST | Single Pole, Single Throw |
| Aux | Auxiliary | ga | Gauge | NS | Not Specified | Std | Standard Edition |
| BAG | Bus, Accelerometer & GI | GB | Gigabyte | ns | Nanosecond | STP | Shielded Twisted Pair |
| BB | Backbox | GI | General Illumination | Ω | Ohm | Sync | Synchronous |
| Bd | Board | GND | Ground | OD | Outside Diameter | TAN | Tan |
| Bidir | Bidirectional | GRN | Green | OLED | Organic Light-Emitting | Tgt | Target |
| BLK | Black | GRY | Gray | Diode | | TH | Truss Head |
| BLU | Blue | HWH | Hex Washer Head | ORN | Orange | TO- | Transistor Outline (Transistor |
| BP | Black Pearl | I2C | Inter-Integrated Circuit | PB | Pop Bumper | Package) | |
| Brkt | Bracket | IC | Integrated Circuit | PCB | Printed Circuit Board | TVS | Transient Voltage Suppressor |
| BRN | Brown | I/O | Input/Output | pcs | Pieces | TX | Transmitter |
| CAT5 | Category 5 Ethernet Cable | IR | Infrared | PEM | Brand Name, Threaded Insert | µF | Microfarad |
| CCW | Counterclockwise | ISO | International Organization for Standardization | pF | Picofarad | UFm | Ultra Fast-mode |
| CE | Collector's Edition | J | Joule | PFH | Phillips Flat Head | USB | Universal Serial Bus |
| Ch | Channel | JJP® | Jersey Jack Pinball® | PLM | Plum | V | Volt |
| CMOS | Complementary Metal- Oxide Semiconductor | kΩ | Kilo Ohm | PPH | Phillips Pan Head | VGA | Video Graphics Array |
| Col | Column | kHz | Kilohertz | PPM | Parts Per Million | VIO | Violet |
| Const | Constant | LAN | local area network | PF | Playfield | VUK | Vertical Up-Kicker |
| CP | Cup Point | LCD | Liquid Crystal Display | PNK | Pink | W | Watt |
| CPU | Central Processing Unit | LE | Limited Edition | PN | Part Number | WS | Wood Screw |
| CS | Cap Screw | LED | Light-Emitting Diode | pos | Position | w/ | With |
| CW | Clockwise | Lg | Large | Qty | Quantity | WHT | White |
| DBA | Dollar Bill Acceptor | LL | Lugs Left or Lower Left | RCA | Brand Name Connector | XCSR | Transceiver |
| DC | Direct Current | LR | Lugs Right or Lower Right | RED | Red | YEL | Yellow |
| Diam | Diameter | LT BLU | Light Blue | rev | Revision | " | Inch |
| DIP | Dual Inline Package | LVDS | Low-Voltage, Differential Signaling | RF | Radio Frequency | | |
| Diff | Differential | mA | Milliampere | RGB | Red, Green, Blue | | |
| DPDT | Double Pole, Double Throw | M-F | Male - Female | Rnd | Round | | |
| Drvr | Driver | MHz | Megahertz | Rt | Right | | |
| DVI | Digital Video Interface | MLCC | Multi-layer Ceramic | RX | Receiver | | |
| Dwg | Drawing | | Capacitor | SATA | Serial Advanced Technology | | |
| ea | Each | MOV | Metal Oxide Varistor | Attachment | | | |
| Elect | Electrolytic | M-M | Male - Male | SB | Slow Blow (fuses) | | |
| EOS | End of Stroke | mm | Millimeter | SD | Secure Digital | | |
| F-F | Female - Female | MOSFET | Metal-Oxide Semiconductor | SH | Socket Head | | |
| FB | Fast Blow (fuses) | | Field-Effect Transistor | SEMS | Integral Star Lock Washer | | |
| FCC | Federal Communications Commission | MS | Machine Screw | SMD | Surface-Mounted Device | | |
| | | Mtg | Mounting | SMS | Sheet Metal Screw | | |
| | | | | SMT | Surface Mount Technology | | |



Jersey Jack Pinball®

Limited Manufacturer's Warranty



The manufacturer of this Pinball Machine, Jersey Jack Pinball® ("JJP®"), warrants to the holder of a valid proof of purchase ("Purchaser" or "You") that the Pinball Machine ("Machine" or "Product") is free from defects in material and workmanship, pursuant to the following terms and conditions, when installed and used normally and in accordance with operation instructions.

What does the Limited Warranty cover - and for how long?

1. The JJP® "Bumper to Post" Limited Warranty covers every part in your new Jersey Jack Pinball® Machine for a period of 30 days from the date of delivery of the Machine to its original Purchaser.
2. In addition, the JJP® Sound Board, I/O Driver Board, CPU, 0.96" OLED Monitor, 27" LCD Monitor and RGB LED (Light) Boards are covered for a period of one year from the date of delivery of the Machine to its original Purchaser. If the Machine is used for commercial purposes (any use other than in-home use), the JJP® Sound Board, I/O Driver Board, CPU, 0.96" OLED Monitor, and 27" LCD Monitor and RGB LED (Light) Boards are covered for a period of 6 months from the date of delivery of the Machine to its original Purchaser.

Who is entitled to Warranty coverage? The original Purchaser.

What will JJP® do? JJP® will repair or replace any covered part at no charge for the part, exclusive of shipping and handling charges or any labor to install the part.

What is not covered? The Limited Warranty does not cover any labor or service calls necessary to replace any part which is a result of improper installation, shipping or handling charges, negligence, misuse, abuse, alteration, modification, rust of any kind, damage caused by electrical surge or by intrusion of any liquid, repairs by persons other than our authorized service personnel, fire, theft, acts of God (such as a flood), and/or improper electrical connection.

What must I do? In order to be eligible for coverage you must register your JJP® Machine within 5 days of delivery on-line at www.JerseyJackPinball.com, by emailing Service@JerseyJackPinball.com or by calling 732-364-9900.

If a covered part requires repair or replacement, email us at Service@JerseyJackPinball.com or open a service ticket at the Jersey Jack Pinball® website and enter a brief, written description of the problem. You may also call us at 732-364-9900; however all warranty claims must be in writing. For repair or replacement, the covered part must be shipped, prepaid, to us or to an authorized JJP® distributor. The repaired, or replacement part, will be returned to You upon warranty verification. In the event that You want a replacement part in advance of returning the original part to JJP®, you must order the part from your authorized distributor and advance the retail cost for the replacement part. The original part must be returned within 21 days for warranty verification. Upon verification of warranty, the amount paid for the advance replacement part will be fully refunded.

State Law Rights: This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Exclusive Agreement: This limited warranty is the complete and exclusive agreement between You and JJP®. It supersedes all other written or oral communications related to this Product. JJP® provides no other warranties for this Product. The warranty exclusively describes all of JJP®'s responsibilities regarding the Product. There are no other express warranties. No one is authorized to make modifications to this limited warranty and you should not rely on any such modification.

Limitations: Implied warranties, including those of fitness for a particular purpose and merchantability (an unwritten warranty that the Product is fit for ordinary use) are excluded. Some states do not allow the exclusion or limitation of implied warranties, so the above limitation or exclusion may not apply to you.

In no event shall JJP® be liable for any indirect, special, incidental, consequential, or similar damages (including, but not limited to, lost profits or revenue, inability to use the Product, or other associated equipment, the cost of substitute equipment, and claims by third parties) resulting from the use of this Product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

WARNINGS & NOTICES

WARNING

FOR SAFETY AND RELIABILITY, substitute parts and equipment modifications are not recommended. Use of non-Jersey Jack Pinball® parts or modifications of game circuitry, may adversely affect game play, or may cause injuries. Substitute parts or equipment modifications may void FCC/Canada Type Acceptance.

PROLONGED EXPOSURE to high volume levels through the cabinet headphone jack can lead to irreversible hearing loss. See **Section E** of this manual for more information.

BECAUSE THIS GAME IS PROTECTED by Federal copyright, trademark and patent laws, unauthorized game conversions may be illegal under Federal law.

THIS 'CONVERSION' PRINCIPLE ALSO APPLIES to unauthorized facsimiles of Jersey Jack Pinball® equipment, logos, designs, publications, assemblies and games (or game feature not deemed to be public domain), whether manufactured with Jersey Jack Pinball® components or not.

IF THE LINE CORD IS DAMAGED, it must be replaced with a cord provided by the game manufacturer (or an equivalent) in order to avoid a hazard.

Notice

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WARNING

NOTE: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

RF Interference Notice

CABLE HARNESS PLACEMENTS and ground strap routing on this game have been designed to keep RF radiation and conduction within levels accepted by the FCC Rules.

TO MAINTAIN THESE LEVELS, reposition harnesses and reconnect ground straps to their original placements, if they become disconnected during maintenance.

FCC/CANADA STICKER. Check the back of your game to verify that an FCC/Canada-certification sticker was attached to your game at the factory. All Games that leave the Jersey Jack Pinball® plant have been tested and found to comply with FCC/Canada Rules. Because the sticker is proof of this fact, legal repercussions to the owner and distributor may result if the sticker is missing. If you receive a game that has no FCC/Canada sticker, call Jersey Jack Pinball® for advice or write us a note on your Game Registration Card. Be sure that the card bears your game's serial number.

FOR SERVICE...

CALL your authorized
Jersey Jack Pinball® Distributor

or VISIT our support site:
<https://www.jerseyjackpinball.com/support/>

Jersey Jack Pinball®

1645 Oak Street
Lakewood, NJ 08701

CAUTION: Transport this game ONLY with the hinged backbox DOWN!